

## ASRS Database Report Set

# TCAS II Incidents

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Report Set Description.....A sampling of TCAS II incident reports.

Update Number .....5.0

Date of Update .....July 27, 2000

Number of Records in Report Set .....50

Number of New Records in Report Set.....50

Type of Records in Report Set .....For each update, new records received at ASRS will  
displace a like number of the oldest records in the  
Report Set, with the objective of providing the fifty  
most recent relevant ASRS Database records. Records  
within this Report Set have been screened to assure  
their relevance to the topic.

**MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data**  
**SUBJECT: Data Derived from ASRS Reports**

The attached material is furnished pursuant to a request for data from the NASA Aviation Safety Reporting System (ASRS). Recipients of this material are reminded of the following points, which must be considered when evaluating these data.

ASRS reports are submitted voluntarily. The existence in the ASRS database of reports concerning a specific topic cannot, therefore, be used to infer the prevalence of that problem within the National Airspace System.

Reports submitted to ASRS may be amplified by further contact with the individual who submitted them, but the information provided by the reporter is not investigated further. Such information may or may not be correct in any or all respects. At best, it represents the perception of a specific individual who may or may not understand all of the factors involved in a given issue or event.

After preliminary processing, all ASRS reports are de-identified. Following de-identification, there is no way to identify the individual who submitted a report. All ASRS report processing systems are designed to protect identifying information submitted by reports, such as, names, company affiliations, and specific times of incident occurrence. There is, therefore, no way to verify information submitted in an ASRS report after it has been de-identified.

The National Aeronautics and Space Administration and its ASRS contractor, Battelle Memorial Institute, specifically disclaim any responsibility for any interpretation which may be made by others of any material or data furnished by NASA in response to queries of the ASRS database and related materials.

Linda J. Connell, Director  
Aviation Safety Reporting System

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**CAVEAT REGARDING STATISTICAL USE OF ASRS INFORMATION**

Certain caveats apply to the use of ASRS statistical data. All ASRS reports are voluntarily submitted, and thus cannot be considered a measured random sample of the full population of like events. For example, we receive several thousand altitude deviation reports each year. This number may comprise over half of all the altitude deviations that occur, or it may be just a small fraction of total occurrences. We have no way of knowing which.

Moreover, not all pilots, controllers, air carriers, or other participants in the aviation system, are equally aware of the ASRS or equally willing to report to us. Thus, the data reflect **reporting biases**. These biases, which are not fully known or measurable, distort ASRS statistics. A safety problem such as near midair collisions (NMACs) may appear to be more highly concentrated in area "A" than area "B" simply because the airmen who operate in area "A" are more supportive of the ASRS program and more inclined to report to us should an NMAC occur.

Only one thing can be known for sure from ASRS statistics—they represent the **lower measure** of the true number of such events that are occurring. For example, if ASRS receives 300 reports of track deviations in 1993 (this number is purely hypothetical), then it can be known with certainty that at least 300 such events have occurred in 1993.

Because of these statistical limitations, we believe that the **real power** of ASRS lies in the **report narratives**. Here pilots, controllers, and others, tell us about aviation safety incidents and situations in detail. They explain what happened, and more importantly, **why** it happened. Using report narratives effectively requires an extra measure of study, the knowledge derived is well worth the added effort.

For text on the strengths and limitations of incident data, the process of using incidents for human factors evaluations, statistical analysis methods and other sources of incident data, see:

Chappell, S.L. (1994). Using voluntary incident reports for human factors evaluations. In N. Johnston, N. McDonald & R. Fuller (Eds.), *Aviation Psychology in Practice*. Aldershot, England: Ashgate.

## Time

Date : 199910

Day : Mon

Local Time Of Day : 0601 To 1200

## Place

Locale Reference.Airport : ATL.Airport

State Reference : GA

Altitude.AGL.Single Value : 1000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.Tower : ATL.Tower

Make Model : B737-700

## Aircraft / 2

Controlling Facilities.Tower : ATL.Tower

Make Model : Commercial Fixed Wing

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 6500

Experience.Flight Time.Last 90 Days : 150

Experience.Flight Time.Type : 1500

ASRS Report : 451958

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Controller : Radar

## Person / 4

Function.Oversight : PIC

Function.Flight Crew : Captain

## Events

Anomaly.Conflict : Airborne Less Severe

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 3

Independent Detector.Other.Flight CrewB : 1

Resolatory Action.Flight Crew : Took Evasive Action

Resolatory Action.Controller : Issued New Clearance

## Supplementary

Problem Areas : Airport

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Narrative :

ACFT #1 WAS PERFORMING A MISSED APCH ON RWY 28 AND WAS GIVEN TURN TO 180 DEGS AND CLB TO 3500 FT. PRIOR TO INITIATION OF TURN, TWR ISSUED INSTRUCTION 'ACFT ON DEP MAINTAIN RWY HDG.' ACFT #1 MAINTAINED AND ACKNOWLEDGED 'RWY HDG' INSTRUCTION. INSTRUCTION APPARENTLY WAS INTENDED FOR ACFT #2 WHICH WAS ON TKOF FROM PARALLEL RWY 27R. BOTH ACFT RECEIVED RA WARNINGS. ACFT #1 TURNED L TO 180 DEGS AFTER VISUAL ACQUISITION OF INTRUDING ACFT.

Synopsis :

NON SPECIFIC INSTRUCTIONS FROM ATL TWR CTLR CAUSE 2 ACFT TO REACT AND BOTH ACFT RECEIVE TCASII RA'S.

## Time

Date : 199910

Day : Sun

Local Time Of Day : 0601 To 1200

## Place

State Reference : OH

Altitude.MSL.Single Value : 29000

## Environment

Flight Conditions : Mixed

## Aircraft / 1

Controlling Facilities.ARTCC : ZOB.ARTCC

Make Model : Regional Jet C165

## Aircraft / 2

Controlling Facilities.ARTCC : ZOB.ARTCC

Make Model : EMB ERA 145 ER&LR

## Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 1275

Experience.Flight Time.Last 90 Days : 150

Experience.Flight Time.Type : 170

ASRS Report : 452071

## Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 7000

Experience.Flight Time.Last 90 Days : 70

Experience.Flight Time.Type : 3000

ASRS Report : 451953

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Radar

ASRS Report : 452073

## Person / 5

Function.Controller : Handoff Position

ASRS Report : 451955

## Events

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Conflict : Airborne Less Severe

Anomaly.Inflight Encounter : Turbulence

Anomaly.Inflight Encounter : Weather

Anomaly.Non Adherence : Published Procedure

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 4

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Took Evasive Action

Resolatory Action.Controller : Issued Alert

Resolatory Action.Controller : Issued New Clearance

Consequence.FAA : Investigated

## **Supplementary**

Problem Areas : ATC Human Performance

Narrative :

ZOB ISSUED A DSCNT FROM FL310 TO FL280. TCASII WARNING FOR TFC AT FL290 (ACFT Y) OPPOSITE DIRECTION. RA TO CLB. WHEN OUR ACFT (X) WAS AT FL290, CONFLICT TFC WAS 10 MI AWAY. WE COMPLIED WITH RESOLUTION AND ATC CLRNC TO FL310, THE TFC PASSED 1700 FT BELOW OUR ACFT. SUPPLEMENTAL INFO FROM ACN 452073: CARJ WAS GIVEN DSCNT TO FL280 FOR CONVERGING TFC AT FL310. HEAD ON TFC AT FL290 WAS OVERLOOKED. CARJ JET COULD HAVE BEEN VECTORED TO ASSURE SEPARATION FROM THE OTHER ACFT AT FL310. I THOUGHT ACFT AT FL310 WERE CLOSER THAN THEY ACTUALLY WERE AFTER REPLAYING THE INCIDENT/TFC.

Synopsis :

CARJ INITIATES TCASII CLB MANEUVER DUE TO OPPOSITE DIRECTION TFC PASSING AT SAME ALT.

**Time**

Date : 199910

Day : Sun

Local Time Of Day : 1801 To 2400

**Place**

State Reference : CA

Altitude.MSL.Bound Lower : 10000

Altitude.MSL.Bound Upper : 11000

**Environment**

Flight Conditions : VMC

**Person / 1**

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 5500

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 400

ASRS Report : 452130

**Person / 2**

Function.Oversight : PIC

Function.Flight Crew : Captain

**Person / 3**

Function.Controller : Approach

**Person / 4**

Function.Flight Crew : Single Pilot

**Events**

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Resolatory Action.Flight Crew : Took Evasive Action

**Supplementary**

Problem Areas : ATC Human Performance

Problem Areas : FAA



Narrative :

I READ BACK CLRNC TO CROSS SNRKL AT 12000 FT. AT THAT TIME, I SWITCHED FREQS TO COMPANY OPS TO ORDER A WHEELCHAIR FOR A PAX. UPON RETURNING BACK TO APCH FREQ, I NOTICED 10000 FT SET ON THE MCP. CAPT TOLD ME WE WERE CLRED TO LAX FROM SNRKL VIA THE MITTS ONE ARR. AS WE DSNDED PAST SNRKL FROM 12000 FT, I RPTED LEAVING 12000 FT FOR 10000 FT. AT 11000 FT WE GOT A TCASII WARNING 'CLB, CLB NOW' SOUNDED. WE LOOKED AT THE TCASII DISPLAY AND SAW TFC AT OUR ALT ON OUR NOSE. WE NEVER HAD A VISUAL ON IT. WE IMMEDIATELY STOPPED THE DSCNT UNTIL WE WERE CLR OF CONFLICT. THAT EVENING WE WERE GIVEN 2 ARRS AND 4 RWY CHANGES INSIDE OF 90 MI FROM LAX -- UNACCEPTABLE. WE CALLED APCH CTL VIA LAND LINE UPON LNDG. THEY SAID WE DID NOTHING WRONG. THEY WERE 'OVERLOADED' AND 'SHOULD HAVE PUT AIRPLANES IN HOLDING PATTERNS' LONG BEFORE THIS SIT EVER DEVELOPED.

Synopsis :

B757 CREW HAD POOR ATC HANDLING ON THE MITTS 1 INTO LAX.

**Time**

Date : 199910  
Day : Sun  
Local Time Of Day : 1801 To 2400

**Place**

Locale Reference.Airport : SFO.Airport  
State Reference : CA  
Altitude.AGL.Single Value : 300

**Environment**

Flight Conditions : VMC

**Component / 1**

Aircraft Component : Traffic Collision Avoidance System (TCAS)  
Aircraft Reference : X  
Problem : Improperly Operated

**Component / 2**

Aircraft Component : Traffic Collision Avoidance System (TCAS)  
Aircraft Reference : Z  
Problem : Improperly Operated

**Person / 1**

Function.Flight Crew : First Officer  
Experience.Flight Time.Total : 10000  
Experience.Flight Time.Last 90 Days : 190  
Experience.Flight Time.Type : 1600  
ASRS Report : 452265

**Person / 2**

Function.Oversight : PIC  
Function.Flight Crew : Captain

**Person / 3**

Function.Oversight : PIC  
Function.Flight Crew : Captain

**Person / 4**

Function.Controller : Local

**Events**

Anomaly.Conflict : Airborne Critical  
Anomaly.Non Adherence : Required Legal Separation  
Independent Detector.Aircraft Equipment : TCAS  
Independent Detector.Other.Flight CrewA : 2  
Independent Detector.Other.Flight CrewB : 3  
Resolatory Action.Flight Crew : Executed Go Around  
Consequence.FAA : Reviewed Incident With Flight Crew

**Supplementary**

Problem Areas : Airport  
Problem Areas : Airspace Structure  
Problem Areas : ATC Human Performance  
Problem Areas : Flight Crew Human Performance

Narrative :

DURING BIG SUR ARR TO SFO, LEVEL AT 4000 FT, BAY APCH ASKED US IF RWY IN SIGHT. REPLY WAS AFFIRMATIVE, AND BAY APCH CLRED US TIP TOE VISUAL TO RWY 28L. AT TURN POINT FOR HDG TO LOC INTERCEPT, BAY APCH CHANGED CLRNC TO QUIET BRIDGE VISUAL FOR RWY 28R. OTHER ACFT, AFTER ACKNOWLEDGING OUR ACFT IN SIGHT, WAS CLRED VISUAL TO RWY 28L AND TO MAINTAIN VISUAL ON OUR ACFT WHICH WAS AHEAD OF THE AIRBUS. CAPT SAW THE OTHER ACFT BEHIND AND L DURING DSCNT. INSIDE OF THE SAN MATEO BRIDGE ON GLIDE PATH AND ALIGNED TO THE R OF RWY AND LOC, CAPT SAW THE OTHER ACFT OVERTAKING US AND EXTREMELY CLOSE. TWR CLRED US TO LAND RWY 28R. AT 1500 FT AND BELOW, TCASII TA ALERTED 3 TIMES WITH A TFC RESOLUTION TO DSND. WE WERE APPROX 300 FT AGL AND OTHER ACFT WAS ALMOST ABEAM. CAPT COULD SEE THE ACFT WAS HIGHER AND ABOVE US, EXTREMELY CLOSE. THE OTHER ACFT PERFORMED A GAR AND WE LANDED. TWR ASKED THE REASON FOR GAR BUT WE WERE UNABLE TO HEAR THE REPLY. CAPT NOTED HE WAS ABLE TO SEE COCKPIT OF THE OTHER ACFT ON SHORT FINAL. VISUAL APCHS TO CLOSE PROX PARALLEL RWYS ARE A CONCERN.

Synopsis :

AN AIRBUS ON A VISUAL APCH TO SFO PERFORMS A GAR AT ABOUT 300 FT AGL. SFO TWR ASKS WHY THE GAR.

## Time

Date : 199910

Day : Sun

Local Time Of Day : 1201 To 1800

## Place

State Reference : PA

Altitude.MSL.Bound Lower : 4000

Altitude.MSL.Bound Upper : 6000

## Environment

Flight Conditions : IMC

## Aircraft / 1

Controlling Facilities.TRACON : PIT.TRACON

Make Model : DC-9 30

## Aircraft / 2

Controlling Facilities.TRACON : PIT.TRACON

Make Model : Beech 1900

## Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 10000

Experience.Flight Time.Last 90 Days : 70

Experience.Flight Time.Type : 5000

ASRS Report : 452266

## Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Departure

## Person / 5

Function.Controller : Local

## Events

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Published Procedure

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolutory Action.Flight Crew : Took Evasive Action

Consequence.FAA : Reviewed Incident With Flight Crew

## Supplementary

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

DEPARTED PIT ON RWY 28R, ASSIGNED 340 DEG HDG AND CLB TO 5000 FT. PASSING THROUGH AT 500 FT AGL STARTED TURN AND GIVEN NEW HEADING OF 360 DEGS AND SWITCH TO DEP CTL FREQ. DEP CTL ASSIGNED 110 DEG HDG AND CLB TO 14000 FT. ACFT WAS CLEANED UP ON SCHEDULE AND AFTER TKOF CHKLIST COMPLETED, CAPT SIMULTANEOUSLY NOTICED TA ON TCASII AND HEARD 'MONITOR VERT SPD' (PASSING THROUGH 80 DEG HDG AND AT 3000 FT AGL). INITIAL TA WAS 3 O'CLOCK POS AND WITHIN 2 MI ON TCASII SCREEN. WITHIN SECONDS (2-3) AN RA ON TCASII AND 'DSND, DSND,' FOLLOWED IMMEDIATELY WITH 'CLB NOW.' CAPT CLBED AT MAX CLB (AT 2000 FPM) AND TURNED AWAY FROM TFC AT 60 DEG HDG. WHILE FO TRIED UNSUCCESSFULLY TO CONTACT TFC VISUALLY AND CONFIRM TFC WITH DEP CTL, DEP CTL GAVE ONE CLRNC TO 'INCREASE CLB RATE.' CLRED TFC AND CONTINUED UNEVENTFULLY TO DEST. CALLED ATC AFTER ARRIVING AT DEST AND TOLD THAT TWR HAD ISSUED A TKOF TO ACFT #2 IMMEDIATELY AFTER OUR TKOF AND GIVEN A HDG OF 360 DEGS. ATC SUPVR ADMITTED ERROR ON ATC AND TOLD US 2 CTLRS HAD BEEN RELIEVED OF DUTY AND THAT ONE HAD BEEN DECERTIFIED BECAUSE OF THE INCIDENT. INCIDENT RPTED TO COMPANY VIA SAFETY RPT AND TELEPHONE CONVERSATIONS. ATC FOLLOWING DAY INDICATED NEAR MISS AT LESS THAN .8 MI HORIZ AND 0 FT VERT. ALTHOUGH TCASII WARNING WAS MINIMAL, QUICK REACTIONS BY CREW AND PROPER TCASII COMMANDS PREVENTED CATASTROPHIC INCIDENT.

Synopsis :

A DEPARTING DC9-30 FLC GETS A TCASII RA FROM TFC CLBING TO THEIR R OUT OF PIT, PA.

**ACN: 452301**

## **Time**

Date : 199910

Day : Mon

Local Time Of Day : 0601 To 1200

## **Place**

Locale Reference.Airport : ATL.Airport

State Reference : GA

Altitude.MSL.Single Value : 3500

## **Environment**

Flight Conditions : VMC

## **Person / 1**

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 5500

Experience.Flight Time.Last 90 Days : 100

Experience.Flight Time.Type : 120

ASRS Report : 452301

## **Person / 2**

Function.Oversight : PIC

Function.Flight Crew : Captain

## **Person / 3**

Function.Oversight : PIC

Function.Flight Crew : Captain

## **Person / 4**

Function.Controller : Local

## **Events**

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Conflict : Airborne Less Severe

Anomaly.Non Adherence : Clearance

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 4

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Controller : Issued New Clearance

Resolatory Action.Controller : Separated Traffic

## **Supplementary**

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

APCH IN ATL, TEMPORARY RWY 28. CAPT WAS FLYING. THE ACFT IN FRONT OF US COULD NOT CLR THE RWY IN TIME, SO THE TWR ISSUED A GAR. THE CAPT INITIATED THE GAR -- NO INSTRUCTIONS WERE GIVEN BY THE TWR AT THE TIME OF THE GAR. THE CAPT PRESSED THE TOGA BUTTON AND CLBED STRAIGHT OUT. DURING THE CLB TO 3500 FT, THE TWR SAID 'ACR X, TURN R TO 180 DEGS, MAINTAIN 3500 FT.' I REPLIED, AND SET THE HDG AND ALT IN THE MCP. THE CAPT CONTINUED STRAIGHT. I TOLD HIM TO TURN TO 180 DEGS. HE CALLED FOR FLAPS 15 DEGS, THEN FLAPS 5 DEGS. BEFORE I COULD TELL HIM TO TURN AGAIN, THE TWR CALLED AND SAID 'ACFT FLYING STRAIGHT AHEAD, MAINTAIN RWY HDG.' NO CALL SIGN WAS GIVEN. THINKING HE WAS TALKING TO US, I REPLIED 'ROGER, ACR X MAINTAINING RWY HDG.' TWR REPLIED 'ROGER ACR X.' I THEN LOOKED TO THE R AND NOTICED AN ACR Y B737 ABEAM AND SLIGHTLY BELOW US WHO HAD DEPARTED THE PARALLEL RWY (RWY 27R). WE THEN GOT A TCASII RA. TWR THEN TOLD US TO TURN TO 180 DEGS. WE TURNED TO THE ASSIGNED HDG. ACR Y REPLIED WE HAD RECEIVED AN RA. WE WERE SENT TO APCH AND CONTINUED BACK AROUND FOR AN UNEVENTFUL APCH AND LNDG. THE CAPT STATED HE HAD THOUGHT THE 180 WAS SPD (180 KTS). THE CAPT WAS FLYING THE HUD. I BELIEVE HE GOT SO WRAPPED UP IN FLYING THE HUD THAT HE LOST SITUATIONAL AWARENESS FOR A MOMENT. A LOT WAS GOING ON (FLAPS COMING UP, LEVELING THE ACFT, ETC) AND WHEN TWR SAID 'ACFT FLYING STRAIGHT OUT...' TO MAINTAIN RWY HDG, I ASSUMED HE WAS TALKING TO US, AND RESPONDED -- AND TWR RESPONDED TO US. TWR SHOULD HAVE USED A CALL SIGN OR EVEN THE COMPANY, IE, ACR X OR ACR Y. IN MY OPINION, THIS WAS THE BIGGEST CONTRIBUTING FACTOR, OTHER THAN THE CAPT MISUNDERSTANDING THE CLRNC. ALSO, IF TWR HAD ISSUED THE HDG AND ALT AT THE TIME OF THE GAR, INSTEAD OF LATER, DURING THE GAR, MOST OF THE CONFUSION WOULD HAVE BEEN AVOIDED.

Synopsis :

CAPT OF A B737-800 WAS DIRECTED TO GO AROUND BY TWR AND FLEW STRAIGHT OUT DUE TO A LACK OF INSTRUCTIONS OTHERWISE. SUBSEQUENTLY, THE TWR CTLR GAVE A TURN WHICH THE CAPT INTERPED TO MEAN AIRSPD INSTEAD OF HDG.

**Time**

Date : 199910

Day : Wed

Local Time Of Day : 1201 To 1800

**Place**

Locale Reference.Airport : SNA.Airport

State Reference : CA

Altitude.MSL.Bound Lower : 500

Altitude.MSL.Bound Upper : 800

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 452347

**Person / 2**

Function.Flight Crew : First Officer

**Person / 3**

Function.Flight Crew : Single Pilot

**Person / 4**

Function.Controller : Local

**Events**

Anomaly.Airspace Violation : Entry

Anomaly.Conflict : NMAC

Anomaly.Non Adherence : FAR

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Took Evasive Action

**Supplementary**

Problem Areas : Airport

Problem Areas : Flight Crew Human Performance



Narrative :

DEPARTED USING NOISE ABATEMENT PROC. AT 800 FT MSL AND 25 DEGS NOSE UP, CLBING ABOUT 6000 FPM, WE GOT A TCASII RA INDICATING TFC 100 FT ABOVE US. THE IVSI COMMANDED AN APPROX 4000 FPM DSCNT. WE NOTIFIED ATC AND LOWERED THE NOSE FROM 25 DEGS TO 15 DEGS AND REDUCED PWR TO IDLE. AT 500 FT MSL WE STILL HAD THE RA, BUT I WAS CONCERNED ABOUT GETTING A GPWS PULL UP COMMAND, SO I LEVELED THE ACFT. THE RA BECAME A TA AND FINALLY A NON THREAT TARGET. WE NEVER RECEIVED AN AUDIO CLR OF CONFLICT RPT. WE NOTIFIED ATC THAT WE WERE CLR AND RESUMED CLB. NO FURTHER INCIDENT. I EXPLAINED TO THE VERY SHAKEN PAX AND CREW WHAT HAD HAPPENED AND TOLD THEM ALL WAS WELL. EVERYONE SEEMED FINE. WE CONTINUED TO DFW. I IMAGINE WE SET OFF EVERY NOISE MONITOR AROUND.

Synopsis :

A B757 ON NOISE ABATEMENT DEP FLIES RESOLUTION DEMANDED BY TCASII AT 800 FT.

**Time**

Date : 199910

Day : Fri

Local Time Of Day : 1201 To 1800

**Place**

State Reference : AZ

Altitude.MSL.Bound Lower : 4300

Altitude.MSL.Bound Upper : 4700

**Environment**

Flight Conditions : VMC

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 7000

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 1000

ASRS Report : 452416

**Person / 2**

Function.Flight Crew : First Officer

**Person / 3**

Function.Flight Crew : Single Pilot

**Person / 4**

Function.Controller : Approach

**Events**

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Conflict : Airborne Less Severe

Anomaly.Non Adherence : Clearance

Independent Detector.Aircraft Equipment : TCAS

Resolatory Action.Flight Crew : Took Precautionary Avoidance Action

Resolatory Action.Controller : Issued Advisory

**Supplementary**

Problem Areas : Flight Crew Human Performance

Narrative :

PHX APCH VECTORED US TO DOWNWIND RWY 26R AT 5000 FT, THEN R TURN 170 DEGS, DSND TO 4000 FT MSL, WHICH BROUGHT US OVER FFZ. FO MAINTAINED A SLOW DSCNT, KNOWING THE FLOOR OF CLASS B WAS 4000 FT. FROM OVER FFZ A 230 DEG HDG ASSIGNED TO INTERCEPT RWY 26R LOC. AT INTERCEPT, AS WINGS WERE LEVELED, 4300 FT, TCASII COMMANDED CLB, FOLLOWED BY PHX NOTIFICATION OF TFC 3 O'CLOCK POS, 3900 FT. IN THE CLB TO A MAX OF 4700 FT, TFC WAS SIGHTED. THE SEBOUND BONANZA APPEARED TO BE AT 3900 FT, JUST BELOW CLASS B AIRSPACE. I WAS NOT AWARE THAT WE WERE ASSIGNED AN ALT AT THE BASE OF CLASS B. I WILL MAINTAIN 500 FT FROM NOW ON. TCASII VOLUME MADE COCKPIT AND RADIO COMS IMPOSSIBLE AT A CRITICAL TIME.

Synopsis :

FLC OF A DHC8-200 CLBED IN RESPONSE TO A TCASII RA DURING VECTOR TO FINAL. RPTR JUST ABOVE THE FLOOR OF CLASS B AIRSPACE AND THE OTHER ACFT WAS JUST BELOW OVER A GA ARPT.

**Time**

Date : 199910

Day : Mon

Local Time Of Day : 0601 To 1200

**Place**

Locale Reference.Airport : MDW.Airport

State Reference : IL

Altitude.MSL.Bound Lower : 2800

Altitude.MSL.Bound Upper : 4000

**Environment**

Flight Conditions : VMC

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 8700

Experience.Flight Time.Last 90 Days : 120

Experience.Flight Time.Type : 2000

ASRS Report : 452453

**Person / 2**

Function.Flight Crew : First Officer

**Person / 3**

Function.Flight Crew : Second Officer

**Person / 4**

Function.Controller : Approach

**Person / 5**

Function.Flight Crew : Single Pilot

**Events**

Anomaly.Conflict : Airborne Critical

Anomaly.Conflict : NMAC

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Took Evasive Action

Consequence.FAA : Reviewed Incident With Flight Crew

**Supplementary**

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

WHILE ON COURSE CTRLINE FOR APCH, WE WERE 'CLRED FOR APCH' AND AT 4000 FT APCH CTL ADVISED OF CONFLICTING TFC LOW, AND THAT WE COULD CLB A LITTLE IF WE WANTED TO. JUST A SECOND OR 2 LATER, ADDITIONAL TFC CAME ON THE TCASII SCREEN FROM THE R. APCH CTL DID NOT ADVISE US OF THIS CO-ALT ('00' ON ICON) TFC WHOSE TCASII RETURN QUICKLY TURNED FROM YELLOW TO RED (TA TO RA). THE VSI ADVISORY WAS TO DSND AT A RATE APPROX -1500 FPM NOSE DOWN. THE ADVISORY WAS COMPLIED WITH, AND THE CESSNA PASSED OVER TOP OF OUR ACFT EXACTLY AT 1200 FT HIGH. THE MISS DISTANCE WAS VERY CLOSE, POSSIBLY IN THE NEIGHBORHOOD OF 200-300 FT. AFTER THE CONFLICT WAS RESOLVED, WE CLBED BACK UP TO RECAPTURE GLIDE PATH AND CONTINUED TO A NORMAL APCH AND LNDG AT MDW. APCH CTL WAS NOTIFIED OF THE PRESENCE OF THE OTHER ACFT.

Synopsis :

A B727-200 CAPT ON APCH TO MDW WAS AVOIDING TFC BELOW THAT HAD BEEN POINTED OUT BY ATC, WHEN A CESSNA SUDDENLY APPEARED ON THE TCASII DISPLAY FROM ABOVE, CAUSING AN NMAC.

**Time**

Date : 199910

Day : Wed

Local Time Of Day : 0601 To 1200

**Place**

State Reference : TX

Altitude.MSL.Bound Lower : 10500

Altitude.MSL.Bound Upper : 11500

**Environment**

Flight Conditions : VMC

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 452720

**Person / 2**

Function.Flight Crew : First Officer

**Person / 3**

Function.Flight Crew : Single Pilot

**Person / 4**

Function.Controller : Approach

**Events**

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Conflict : Airborne Less Severe

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Took Precautionary Avoidance Action

Resolatory Action.Controller : Issued Advisory

Consequence.FAA : Reviewed Incident With Flight Crew

**Supplementary**

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

ATC FACILITY: REGIONAL APCH CTL. LOCATION--APCHING DIETZ INTXN. RECEIVED CTLR ADVISORY THAT A BARON WOULD CROSS IN FRONT OF US AT 11500 FT VFR. OBSERVED THE ACFT ON TCASII WHILE WE BOTH SEARCHED VISUALLY FOR IT. THE ALT READOUT WE HAD ON HIM WAS +300 FT. COULD NOT ACQUIRE THE ACFT VISUALLY, AND THEN GOT AN RA FROM TCASII. I (PNF) FOLLOWED IT GENTLY AND WENT DOWN TO APPROX 10500 FT. THEN GENTLY RETURNED TO 11000 FT. CTLR BECAME CONCERNED THAT IN VFR WE FOLLOWED THE RA, EVEN WHEN THE BARON PLT ADVISED THAT HE HAD US IN SIGHT. IF WE COULD NOT ACQUIRE HIM VISUALLY, IT WOULD NOT HAVE BEEN CORRECT PROCEDURALLY OR USING COMMON SENSE TO NOT FOLLOW THE RA.

Synopsis :

CAPT OF A FOKKER 100 DSNDDED IN RESPONSE TO A TCASII RA SINCE HE HAD NOT HAD A VISUAL SIGHTING OF THE ACFT GIVEN IN AN ADVISORY BY ATC. THE CTLR ASKED WHY THAT RPTR HAD DSNDDED AFTER BEING GIVEN AN ADVISORY OF A BEECH BARON PLT CONFIRMED HAVING THE F100 IN SIGHT.

**Time**

Date : 199910

Day : Tue

Local Time Of Day : 1801 To 2400

**Place**

State Reference : GA

Altitude.MSL.Bound Lower : 27000

Altitude.MSL.Bound Upper : 28500

**Environment**

Flight Conditions : VMC

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 16000

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 3500

ASRS Report : 453008

**Person / 2**

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 5500

Experience.Flight Time.Last 90 Days : 210

Experience.Flight Time.Type : 1200

ASRS Report : 453007

**Person / 3**

Function.Oversight : PIC

Function.Flight Crew : Captain

**Person / 4**

Function.Controller : Radar

**Events**

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Resolatory Action.Flight Crew : Took Evasive Action

Resolatory Action.Controller : Issued New Clearance

**Supplementary**

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance



Narrative :

WHEN CRUISING AT FL280 WE HAD A TA FOLLOWED BY AN RA. SIMULTANEOUSLY WE HEARD CTR TELL AN ACR FLT TO DSND BACK DOWN TO FL270 AS THERE WAS TFC AT FL280. WE FOLLOWED OUR RA AND CLBED AND NOTIFIED CTR OF OUR ACTIONS. WE CLBED APPROX 500 FT BEFORE CLRING TFC (WHICH WE SAW VISUALLY AS IT PASSED) AND DSNDDED BACK DOWN TO FL280. THE MINIMUM TFC SEPARATION OBSERVED ON TCASII WAS 500 FT. AFTER THE TFC WAS CLR, WE HEARD CTR CLR THEM TO A HIGHER ALT. THERE WERE NO FURTHER COMMENTS MADE BY US OR ZJX AND I DON'T THINK OUR CLB IMPACTED ANY HIGHER TFC.

Synopsis :

MD88 CREW HAD A TCASII RA WITH AN MD80 IN ZJX CLASS A AIRSPACE.

## Time

Date : 199910

Day : Wed

Local Time Of Day : 1201 To 1800

## Place

State Reference : WV

Altitude.MSL.Bound Lower : 27300

Altitude.MSL.Bound Upper : 28000

## Environment

Flight Conditions : VMC

## Component / 1

Aircraft Component : TCAS Equipment

Aircraft Reference : X

Problem : Design Deficiency

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 9000

Experience.Flight Time.Last 90 Days : 160

Experience.Flight Time.Type : 600

ASRS Report : 453051

## Person / 2

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 10000

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 2300

ASRS Report : 453050

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Radar

## Events

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Published Procedure

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Took Evasive Action

Consequence.FAA : Reviewed Incident With Flight Crew

## Supplementary

Problem Areas : Aircraft

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Narrative :

LOSS OF SEPARATION. AT FL280, WBOUND ON J24, WE EXPERIENCED A TCASII RA TO DSND. ZDC SAID WE GOT LOST IN THE SHUFFLE AND DID A GOOD JOB. WE DSND'D TO FL273 AND HIT .78 MACH BEFORE CORRECTING BACK TO COURSE AND ALT. HAD WE HAD A BETTER RADAR SCOPE/SYS TO SEE THE TARGET BETTER IT MAY HAVE GIVEN US BETTER AND EARLIER WARNING. WE ONLY HAD THE 6.5 NM AND 2 NM RING SCOPE. SUPPLEMENTAL INFO FROM ACN 453050: WHILE PROCEEDING WBOUND ON J24 APPROX 5 NM E OF HVQ, WE RECEIVED FIRST A TA, THEN AN RA FOR AN ACFT AT OUR 11:30 O'CLOCK POS, 6.5 MI OUT AND CLOSING. AN RA OCCURRED, THE AUTOPLT WAS DISCONNECTED AND A DSCNT WAS INITIATED FOLLOWING THE GREEN BAND OF THE IVSI. A TURN TO THE R WAS ALSO INITIATED AT THIS TIME. THE ACFT PASSED TO OUR L AT APPROX 1.5 NM AND 600 FT ABOVE US. ATC WAS ADVISED, AND A CLB INITIATED BACK TO FL280.

Synopsis :

A B737 CREW, WBOUND ON J24, EXPERIENCED A TCASII RA DUE TO AN ATC SEPARATION PROB.

**Time**

Date : 199910

Day : Mon

Local Time Of Day : 0601 To 1200

**Place**

Locale Reference.Airport : DTW.Airport

State Reference : MI

Altitude.MSL.Single Value : 7000

**Environment**

Flight Conditions : VMC

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 10280

Experience.Flight Time.Last 90 Days : 180

Experience.Flight Time.Type : 8000

ASRS Report : 453140

**Person / 2**

Function.Flight Crew : First Officer

**Person / 3**

Function.Controller : Approach

**Person / 4**

Function.Flight Crew : Single Pilot

**Events**

Anomaly.Conflict : Airborne Critical

Independent Detector.Aircraft Equipment : TCAS

Resolatory Action.Flight Crew : Took Evasive Action

**Supplementary**

Problem Areas : Aircraft

Problem Areas : Airspace Structure

Narrative :

TCASII RA DSNDING FROM 8000 FT TO 6000 FT. WE GOT A TCASII RA 'CLB NOW 1500 FPM.' WE STOPPED THE DSCNT AND STARTED A CLB AND THE RA COMMAND STOPPED AND WE GOT A CLR OF CONFLICT ADVISORY. RA LASTED ABOUT 2 SECONDS. NO VISUAL SIGHTING OF THE CONFLICT ACFT. I RPTED THE RA TO APCH. APCH RPTED NO OTHER ACFT WITHIN 5 MI OF OUR ACFT. WE THEN STARTED OUR DSCNT TO 6000 FT AS CLRED.

Synopsis :

DC9 TAKES EVASIVE ACTION FOR AN RA WITH NO RPTED TFC IN CLASS B AIRSPACE.

**ACN: 453160**

### **Time**

Date : 199910

Day : Wed

Local Time Of Day : 0601 To 1200

### **Place**

State Reference : TX

Altitude.MSL.Bound Lower : 10000

Altitude.MSL.Bound Upper : 11000

### **Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 453160

### **Person / 2**

Function.Flight Crew : First Officer

### **Person / 3**

Function.Controller : Departure

### **Person / 4**

Function.Flight Crew : Single Pilot

### **Events**

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Conflict : Airborne Critical

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Took Evasive Action

### **Supplementary**

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

LEVEL 10000 FT IN L TURN TO 360 DEGS, TCASII TA THEN RA CLB, THEN INCREASE CLB. CLB TO APPROX 10800 FT TO 11000 FT. RA COMMANDED 3500 FPM CLB TFC VISUAL THEN LOST UNDER NOSE NO NMAC.

Synopsis :

ACR FLIES TCASII RA IN CLASS B AIRSPACE.

## Time

Date : 199910

Day : Tue

Local Time Of Day : 1201 To 1800

## Place

Locale Reference.Airport : INT.Airport

State Reference : NC

Altitude.MSL.Single Value : 13000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.ARTCC : ZTL.ARTCC

Make Model : Light Transport

## Aircraft / 2

Controlling Facilities.ARTCC : ZTL.ARTCC

Make Model : Fokker 100

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 12000

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 10000

ASRS Report : 453264

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Radar

## Events

Anomaly.Conflict : Airborne Less Severe

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : FAR

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Took Precautionary Avoidance Action

## Supplementary

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance



Narrative :

WE WERE ACFT X FROM CLT TO LYH AT 13000 FT. ZTL (134.55) CALLED TFC IN OUR 9 O'CLOCK POS. WE ACKNOWLEDGED TFC IN SIGHT. OUR FLT WAS CALLED TO AN ACFT (F100) AND ACKNOWLEDGED IN SIGHT. ZTL CLRED THE ACR FLT TO DSND THROUGH OUR ALT MAINTAINING VISUAL SEPARATION. THEY ACCEPTED THE CLRNC. THE FLT PATHS WERE CONVERGING AND I NOTED TO MY FO THAT THIS WOULD BE CLOSE. WITHIN MOMENTS WE HAD A TCASII ALERT FOR TFC AND THEN A COMMAND TO MONITOR VERT SPD. A 1500 FPM DSCNT WAS INITIATED. WE LEVELED 1300 FT BELOW ASSIGNED ALT WITH THE CLR OF CONFLICT NOTIFICATION AS THE JET PASSED 1000 FT DIRECTLY OVERHEAD. WHILE CLBING BACK TO OUR ASSIGNED ALT, ZTL ASKED ABOUT OUR ALT. I NOTED THE DEV DUE TO THE TCASII ALERT. WE WERE THEN HANDED OVER TO THE NEXT SECTOR AS IF NOTHING HAD OCCURRED. I BELIEVE THAT THE OTHER FLT LOST SIGHT OF US OR MISJUDGED THE CLOSURE RATE.

Synopsis :

A FOKKER 100 FLC WAS GIVEN A VISUAL SEPARATION RESTR TO A DSCNT CLRNC AND FAILED TO MAINTAIN SEPARATION FROM THE RPTING FLC.

## **Time**

Date : 199910

Day : Thu

Local Time Of Day : 1201 To 1800

## **Place**

Locale Reference.Airport : LAS.Airport

State Reference : NV

Altitude.MSL.Bound Lower : 7000

Altitude.MSL.Bound Upper : 9000

## **Environment**

Flight Conditions : VMC

## **Aircraft / 1**

Controlling Facilities.TRACON : L30.TRACON

Make Model : Widebody, Low Wing, 4 Turbojet Eng

## **Aircraft / 2**

Controlling Facilities.TRACON : L30.TRACON

Make Model : MD-80 Series (DC-9-80) Undifferentiated or Other Model

## **Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 22000

Experience.Flight Time.Last 90 Days : 150

Experience.Flight Time.Type : 1200

ASRS Report : 453339

## **Person / 2**

Function.Flight Crew : First Officer

## **Person / 3**

Function.Oversight : PIC

Function.Flight Crew : Captain

## **Person / 4**

Function.Controller : Departure

## **Events**

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Published Procedure

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 4

Independent Detector.Other.Flight CrewA : 1

Resolutive Action.Flight Crew : Took Precautionary Avoidance Action

Resolutive Action.Controller : Issued Alert

Resolutive Action.Controller : Issued New Clearance

## **Supplementary**

Problem Areas : Airport

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

MD80 (ACFT Y) TOOK OFF AHEAD OF US (ACFT X) ON RWY 25R AT LAS BY APPROX 1 1/2 MINS AND CONTINUED ON RWY HDG TO THE W FOR UNKNOWN DISTANCE. WE WERE CLRED FOR TKOF AND FLEW OVETO 3 DEP SID. ON FIRST CALL, DEP CTL CLRED US TO 15000 FT. WE OBSERVED THE MD80 APPROX 4 MI TO THE W OF US STARTING A R TURN AND APPEARED TO BE DEPARTING NBOUND. APPROX 1/2 WAY THROUGH OUR R TURN TO 070 DEGS, WE SAW THE MD80 CONVERGING ON OUR FLT PATH. DEP CTL ASKED IF WE HAD MD80 IN SIGHT. WE REPLIED 'AFFIRMATIVE.' DEP CTL ASKED US TO 'MAINTAIN VISUAL SEPARATION' AND TO CONTINUE CLB TO 15000 FT. WE INCREASED RATE OF CLB AND THE MD80 CONTINUED TO TURN (AND CLB) TOWARDS OUR FLT PATH, AFTER WE WERE ON A 070 DEG HDG AND CROSSED APPROX 3000 FT IN FRONT OF US AND 800-1000 FT BELOW US. WE WERE CLBING AT A VERY RAPID RATE. WE RECEIVED A TCASII TA AND AN RA BRIEFLY (ADVISING 'MONITOR VERT SPD') AS WE WERE CLBING. I DO NOT UNDERSTAND HOW THIS CONFLICT WAS ALLOWED TO DEVELOP AND WAS NOT RESOLVED EXCEPT FOR THE REQUEST TO 'MAINTAIN VISUAL SEPARATION' BY DEP CTL. THIS WAS IN A FULL RADAR ENVIRONMENT. APPARENTLY THE MD80 FLEW WELL BEYOND THE 4 DME TURN POINT, AND DEP CTL DID NOT NOTICE. IF WE HAD NOT BEEN LIGHT ENOUGH TO INCREASE OUR CLB RATE AS MUCH AS WE DID, THIS WOULD HAVE BEEN A VERY CLOSE CONFLICT.

Synopsis :

DEPARTING HVY JET OBSERVES CONFLICT WITH PREVIOUS DEPARTING MD80. L30 REQUESTS IF IN TRAIL ACFT CAN PROVIDE VISUAL SEPARATION FROM MD80. PIC OF IN TRAIL ACFT BELIEVES THIS WAS POOR CTLING.

## Time

Date : 199910

Day : Sat

Local Time Of Day : 1201 To 1800

## Place

Locale Reference.Airport : SWF.Airport

State Reference : NY

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.Tower : SWF.Tower

Make Model : Citation V

## Aircraft / 2

Controlling Facilities.TRACON : N90.TRACON

Controlling Facilities.Tower : SWF.Tower

Make Model : Regional Jet C165

## Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 10400

Experience.Flight Time.Last 90 Days : 175

Experience.Flight Time.Type : 150

ASRS Report : 453565

## Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Local

## Events

Anomaly.Incursion : Landing Without Clearance

Anomaly.Conflict : Ground Critical

Anomaly.Non Adherence : Clearance

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 4

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Rejected Takeoff

Resolatory Action.Flight Crew : Took Evasive Action

Resolatory Action.Controller : Issued New Clearance

## Supplementary

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

ACFT X CLRED BY LCL CTLR FOR TKOF RWY 16. CRJ (ACFT Y) WAS ON A VISUAL APCH TO RWY 9 AND HAD NOT CALLED TWR. ACR Y CALLED ON A SHORT FINAL/BASE (IN A STEEP BANK) TO THE LCL CTLR THAT THEY WERE LNDG RWY 9. ACR Y PLT DID NOT ALLOW LCL CTLR TO TALK TO ACFT X. FO IN ACFT X SAW CONFLICT AND EXECUTED THE ABORT. LCL CTLR ALSO CALLED ACFT X TO ABORT. ACR Y PLT LANDED RWY 9 AND APPEARED TO HAVE THAT INTENTION WITHOUT CALLING LCL CTLR. HAD ACFT X NOT SEEN ACR Y, A COLLISION AT THE INTXNS OF RWYS 16/9 WAS LIKELY. CONCERNED THAT ACR Y AND NEW YORK TRACON DID NOT COMMUNICATE TO SWF CTLR AND SET UP A POTENTIAL NMAC SIT. ACFT X TCASII ALERTED CREW TO PRESENCE JUST AFTER TKOF ROLL INITIATED.

Synopsis :

C560 FO OBSERVES CARJ LNDG ON INTERSECTING RWY AND ABORTS TKOF.

## Time

Date : 199910

Day : Sat

Local Time Of Day : 1201 To 1800

## Place

Locale Reference.Airport : FSD.Airport

State Reference : SD

Altitude.MSL.Bound Lower : 2200

Altitude.MSL.Bound Upper : 2500

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.TRACON : FSD.TRACON

Controlling Facilities.Tower : FSD.Tower

Make Model : SF 340b

## Aircraft / 2

Controlling Facilities.Tower : FSD.Tower

Make Model : Skyhawk 172/Cutlass 172

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 4500

Experience.Flight Time.Last 90 Days : 250

Experience.Flight Time.Type : 2000

ASRS Report : 453566

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Flight Crew : Single Pilot

## Person / 4

Function.Controller : Approach

## Person / 5

Function.Controller : Local

## Events

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Conflict : NMAC

Anomaly.Non Adherence : Published Procedure

Anomaly.Non Adherence : Required Legal Separation

Anomaly.Other Anomaly : Unstabilized Approach

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Returned To Original Clearance

Resolatory Action.Flight Crew : Took Evasive Action

Resolatory Action.Controller : Issued Alert

## Supplementary

Problem Areas : Airport

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

UPON BEING CLRED FOR A VISUAL APCH INTO FSD, WE (ACFT X) WERE GRANTED PERMISSION TO ENTER R TFC (BASE) TO RWY 33. JUST PRIOR TO ENTERING CLASS D AIRSPACE AND TURNING FINAL, WE WERE ADVISED OF TFC (ACFT Y) AND TOLD TO SWITCH TO TWR. AT THE SAME TIME, TCASII ALERTED US OF TFC. VISUAL SCANNING WAS EMPLOYED TO NO AVAIL. LESS THAN 3 SECONDS LATER, AN RA ON TCASII WAS INDICATED. EVASIVE ACTION WAS TAKEN WITHOUT TFC EVER BEING SEEN. APCH WAS ALTERED AND A SAFE LNDG WAS MADE. IT WASN'T KNOWN BY MY CREW IF THE OTHER ACFT HAD VISUAL CONTACT WITH US OR NOT. TWR WAS IN CONTACT WITH A CESSNA AND WAS UNABLE TO ADVISE US OF TFC UNTIL AFTER THE RA BECAUSE OF CLOSE PROX TO ACFT. (IT SEEMED COM BTWN APCH CTL AND TWR CTL WAS INAPPROPRIATE AND LACKING. WITHOUT TCASII OR WITH A DEFERRED TCASII, A MIDAIR COLLISION MIGHT HAVE OCCURRED.

Synopsis :

SF34 PIC INITIATES TCASII EVASIVE MANEUVER FOR ISSUED, BUT NOT SIGHTED, TFC WHEN TURNING FINAL FOR FSD. PIC CONCERNED WITH PERCEIVED POOR INTERFAC COORD.





**Time**

Date : 199910  
Day : Sun  
Local Time Of Day : 1801 To 2400

**Place**

Locale Reference.Airport : TEB.Airport  
State Reference : NJ  
Altitude.MSL.Bound Lower : 3000  
Altitude.MSL.Bound Upper : 4000

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.TRACON : N90.TRACON  
Make Model : B737-500

**Aircraft / 2**

Controlling Facilities.TRACON : N90.TRACON  
Make Model : MD-80 Series (DC-9-80) Undifferentiated or Other Model

**Person / 1**

Function.Flight Crew : First Officer  
Experience.Flight Time.Total : 3500  
Experience.Flight Time.Last 90 Days : 300  
Experience.Flight Time.Type : 500  
ASRS Report : 453602

**Person / 2**

Function.Oversight : PIC  
Function.Flight Crew : Captain

**Person / 3**

Function.Controller : Approach

**Person / 4**

Function.Oversight : PIC  
Function.Flight Crew : Captain

**Events**

Anomaly.Conflict : NMAC  
Anomaly.Non Adherence : Published Procedure  
Anomaly.Non Adherence : Required Legal Separation  
Independent Detector.Aircraft Equipment : TCAS  
Independent Detector.Other.ControllerA : 3  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Took Evasive Action  
Resolatory Action.Flight Crew : Took Precautionary Avoidance Action  
Resolatory Action.Controller : Issued Alert  
Resolatory Action.Controller : Issued New Clearance

**Supplementary**

Problem Areas : Airspace Structure  
Problem Areas : ATC Human Performance  
Problem Areas : Flight Crew Human Performance

Narrative :

WE (X) WERE ON A VECTOR, 220 DEGS, 10-20 MI W OF TETERBORO ARPT, PARALLELING THE ILS RWY 22L FINAL APCH COURSE. THE CTLR WAS VERY BUSY. THE CTLR (APCH) TOLD US TO TURN R 120 DEG HDG. AT AROUND 360 DEGS WE GOT A TCASII TA. AT OUR 1 O'CLOCK POS WAS TFC (Y) 500 FT ABOVE, THEN 400 FT ABOVE, 300 FT ABOVE. I DISCONNECTED THE AUTOPLT, LEVELED THE WINGS. THE CAPT TOOK THE ACFT. I THEN SAW AN MD80 (Y) AT ABOUT MY 12:30-1 O'CLOCK POS TURNING TO THE R SLIGHTLY. I TOLD THE CAPT TURN HARD R, AT THE SAME TIME THE CTLR WAS YELLING 'TURN L 190 DEGS.' WE CONTINUED OUR R TURN AND MADE A RAPID DSCNT. THE CTLR WAS YELLING TO DSND TO 3000 FT IMMEDIATELY. TCASII ALERT SAID CLB (RA). THE MD80 WAS DEFINITELY ABOVE US BY 100 FT AND NOT DSNDING. CTLR WAS REMOVED FROM THE SCOPE. NORMAL APCH AND LNDG. IF WE WERE IN ACTUAL IFR AT TIME, THERE WOULD HAVE BEEN A MIDAIR. TCASII MAY NOT HAVE BEEN ACCURATE DUE TO THE 180-270 DEG TURN. TCASII DID NOT GIVE AN ADEQUATE TA AND GAVE A WRONG RA.

Synopsis :

B737 FLC INITIATES EVASIVE MANEUVER OBSERVING A DSNDING MD80 ABOVE AND ON A CONVERGING FLT PATH WHILE UNDER N90 CTL.

## Time

Date : 199910

Day : Sun

Local Time Of Day : 1201 To 1800

## Place

State Reference : OH

Altitude.MSL.Bound Lower : 13000

Altitude.MSL.Bound Upper : 14000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.ARTCC : ZOB.ARTCC

Make Model : A319

## Aircraft / 2

Controlling Facilities.ARTCC : ZOB.ARTCC

Make Model : Any Unknown or Unlisted Aircraft Manufacturer

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 14000

Experience.Flight Time.Last 90 Days : 180

Experience.Flight Time.Type : 1000

ASRS Report : 453612

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Events

Anomaly.Altitude Deviation : Undershoot

Anomaly.Conflict : Airborne Less Severe

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Published Procedure

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Resolutive Action.Flight Crew : Took Precautionary Avoidance Action

Resolutive Action.Controller : Issued Advisory

Consequence.FAA : Reviewed Incident With Flight Crew

## Supplementary

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

WE (X) WERE GIVEN A DSCNT FROM FL190 TO 10000 FT AND TOLD TO MAINTAIN 2500 FPM THROUGH 11000 FT. WE COMPLIED WITH THE RATE, HOWEVER, PASSING 14000 FT WE GOT A TCASII TA FOR TFC (Y) INSIDE OF 2 MI AND AHEAD OF US. (HE WAS AT 12000 FT.) ATC DID NOT WARN US OF THE TFC OR OF ANY IMPENDING CONFLICT. I CALLED CTR AND TOLD THEM THAT THIS DSCNT WAS NOT GOING TO WORK AND IF WE CONTINUED TO 10000 FT WE WERE GOING TO GET AN RA. I THOUGHT IT UNNECESSARY, IF NOT DANGEROUS. I TOLD THEM WE WERE STOPPING OUR DSCNT AT 13000 FT TO ALLOW THE ACFT TO PASS. CTR SAID THE ACFT WAS PASSING OFF OUR L AND WE CONTINUED THE DSCNT TO 10000 FT. AGAIN AFTER THE PARTIAL CLRNC, CTR WAS OF LITTLE HELP. IN FACT, THE CLRNC IS WHAT CAUSED THE PROB. I DO NOT SEE THE NEED FOR THIS TYPE OF CTILING.

Synopsis :

A319 PIC STOPS DSCNT WHEN OBSERVING TFC PASSING BELOW AND AWAY FROM INTENDED FLT PATH.

## Time

Date : 199911

Day : Mon

Local Time Of Day : 1201 To 1800

## Place

State Reference : CA

Altitude.MSL.Single Value : 5000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.TRACON : SCT.TRACON

Make Model : MD-80 Super 80

## Aircraft / 2

Controlling Facilities.TRACON : SCT.TRACON

Make Model : Skyhawk 172/Cutlass 172

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 453671

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Single Pilot

## Person / 4

Function.Controller : Departure

## Events

Anomaly.Conflict : NMAC

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Resolatory Action.Flight Crew : Took Evasive Action

## Supplementary

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Problem Areas : FAA

Problem Areas : Flight Crew Human Performance

Narrative :

NMAC SBOUND OFF LONG BEACH. AFTER A TURN TO A 180 DEG HDG AS CLRED OFF LGB AND A CONTINUED CLB TO 7000 FT, WE HAD A TA AND SUBSEQUENT RA CLBING THROUGH 5000 FT AT THE POS SPECIFIED IN THE HEADER OF THIS RPT. THE FO WAS FLYING AND ALSO MADE A L TURN IN THE CLB AFTER VISUALLY ACQUIRING THE CESSNA 172, WITH 20 DEGS OF BANK. NO FURTHER EVASIVE ACTION WAS TAKEN AS WE GOT THE CLR OF CONFLICT TCASII CALL AS WE REJOINED OUR CLRNC AND ADVISED ATC. THERE WERE NO INJURIES RPTED IN THE CABIN AS OUR CLBING TURN WASN'T UNUSUAL AFTER TKOF. IT APPEARED TO THE FO THAT THE CESSNA WAS IN LEVEL FLT AND AS HE TURNED AWAY AFTER ACQUIRING US THAT HE GOT NO CLOSER THAN 100 FT VERTLY AND 150 FT HORIZLY. WE WERE 2 SECONDS APART INITIALLY AND HE PASSED BELOW US DURING THE TCASII RA. OUR FLT WAS IFR.

Synopsis :

MD80 CREW HAD TCASII RA DEPARTING LGB.

## Time

Date : 199911

Day : Tue

Local Time Of Day : 0601 To 1200

## Place

Locale Reference.Airport : STL.Airport

State Reference : MO

Altitude.MSL.Bound Lower : 3200

Altitude.MSL.Bound Upper : 3500

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.TRACON : T75.TRACON

Make Model : Medium Large Transport, Low Wing, 2 Turbojet Eng

## Aircraft / 2

Controlling Facilities.TRACON : T75.TRACON

Make Model : MD-80 Series (DC-9-80) Undifferentiated or Other Model

## Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 8823

Experience.Flight Time.Last 90 Days : 224

Experience.Flight Time.Type : 2087

ASRS Report : 453710

## Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 10750

Experience.Flight Time.Last 90 Days : 209

Experience.Flight Time.Type : 7050

ASRS Report : 453712

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Approach

## Events

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Non Adherence : Clearance

Independent Detector.Aircraft Equipment : Altitude Alert

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Returned To Assigned Altitude

Resolatory Action.Controller : Issued Advisory

Resolatory Action.Controller : Issued New Clearance

## Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

IN A DSCNT TO 3500 FT, WE WERE GIVEN MULTIPLE HEADING CHANGES. DURING THE HEADING CHANGES, THE CTLR KEPT RPTING MD80 TFC FOR THE PARALLEL RWY, AND ITERATED THAT WE NEEDED TO HAVE VISUAL SEPARATION SO HE COULD CLR US FOR A VISUAL APCH. ON TCASII, THE TFC WAS APPROX 2000 FT BELOW OUR ALT AND 2-3 MI N OF OUR POS. BOTH OF US XMITTED THAT WE HAD THE TFC IN SIGHT, POSSIBLY BLOCKING XMISSIONS FROM THE CTLR. THE CTLR THEN ASKED US OUR ALT. I RESPONDED, '...THIRTY-TWO HUNDRED FT, CORRECTING.' HE THEN GAVE US A HEADING CHANGE TO 210 DEGS, AND BEGAN TO VECTOR US AROUND FOR A SECOND APCH. I BELIEVE THAT MY ROLL IN BACKING UP THE CAPT WAS DEGRADED BY THE FOLLOWING FACTORS: THE REQUIREMENT FOR OUTSIDE VISUAL SCAN FOR RPTED TFC. MULTIPLE TFC CALLS FROM ATC FOCUSING MY ATTN TO OTHER ACFT. MULTIPLE HEADING CHANGES. CONFIGURING ACFT FOR LNDG WHILE TRYING TO FIND OTHER TFC. 2 DIFFERENT ALTIMETER SYS, ONE DRIVEN BY AN ADC, THE OTHER BY RAW BAROMETRIC INPUT. ANOTHER MORE INSIDIOUS FACTOR IS THE DEVELOPED TRUST IN THE OTHER CREW MEMBER. HAVING FLOWN MANY LEGS WITH THE OTHER PLT OVER THE COURSE OF THE MONTH, I WAS EXTREMELY IMPRESSED BY HIS COMPETENT ADHERENCE TO BOTH FAA AND COMPANY MANDATED REGS AND PROCS WHILE MAINTAINING A CALM, PROFESSIONAL DEMEANOR IN THE COCKPIT. REGARDLESS OF THE ABOVE FACTORS AND CONSIDERATIONS, MY OPINION IS THAT THERE IS NO INST, DEVICE, OR GADGET CAN REPLACE AN AVIATOR'S SKILL AND JUDGEMENT. THIS OCCASION HAS ONLY REINFORCED MY BELIEF THAT A PLT'S BEST SAFETY DEVICE IS HIS/HER OWN TRAINING AND SELF-DISCIPLINE. SUPPLEMENTAL INFO FROM ACN 453712: CORRECTIVE ACTION FOR ME IS TO DEFINITELY INCREASE MY SITUATIONAL AWARENESS OF THE ACFT'S POS IN SPACE COMPARED TO THAT ASSIGNED, AND TO VERIFY CLRNCS FOR THE LDA OR VISUAL APCH. AND ALT CAPTURE FEATURE ON THE AUTOPLT WOULD HAVE PRECLUDED ANY PART OF THIS INCIDENT FROM OCCURRING. POSSIBLY SIMULTANEOUS RADIO XMISSIONS PRECLUDED US FROM COMMUNICATING OUR VISUAL ACQUISITION OF THE LOW TFC TO APCH CTL, OR FOR HIM ADVISING US TO CHK OUR ALT SOONER. THE ALT ALERT TONE FUNCTION (NOTIFYING PLTS WITHIN 300 FT APCHING A SELECTED ALT, AND PASSING 300 FT PAST A SELECTED ALT) SHOULD BE A CONTINUOUS TONE ONCE PAST THE SELECTED ALT TO PREVENT INADVERTENT ALTDEVS.

Synopsis :

AN MLG FLC DSNDND BELOW THE ASSIGNED ALT ON APCH TO STL.



**ACN: 453966**

## **Time**

Date : 199910

Day : Tue

Local Time Of Day : 1201 To 1800

## **Place**

State Reference : KS

Altitude.MSL.Single Value : 29000

## **Environment**

Flight Conditions : VMC

## **Aircraft / 1**

Controlling Facilities.ARTCC : ZKC.ARTCC

Make Model : Talon

## **Aircraft / 2**

Controlling Facilities.ARTCC : ZKC.ARTCC

Make Model : MD-80 Series (DC-9-80) Undifferentiated or Other Model

## **Person / 1**

Function.Controller : Radar

ASRS Report : 453966

## **Person / 2**

Function.Flight Crew : Single Pilot

## **Person / 3**

Function.Oversight : PIC

Function.Flight Crew : Captain

## **Events**

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Published Procedure

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 1

Independent Detector.Other.Flight CrewA : 3

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Returned To Assigned Altitude

Resolatory Action.Flight Crew : Took Evasive Action

## **Supplementary**

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

THE MD80, ACR Y, WAS AT FL290 NBOUND. THE T38, ACFT X, WAS CLBING NEBOUND TO AN ASSIGNED ALT OF FL280. CONFLICT ALERTED WAS ACTIVATED AS ACFT X CLBED THROUGH THE ASSIGNED ALT. MODE C INDICATED FL284 AS I ASKED ACFT X TO SAY ALT. THE PLT HESITATED, THEN RESPONDED THAT HE WAS AT FL280. ACR Y ADVISED THAT THEY HAD A TCASII ALERT AND WERE CLBING TO AVOID TFC, AT THE SAME TIME THE MODE C OF ACFT X INDICATED HE WAS CONTINUING HIS CLB, FINALLY LEVELING AT FL289. THE TARGETS APPEARED TO MERGE WITH 700 FT VERT SEPARATION (DUE TO ACR Y'S EVASIVE MANEUVER). I AGAIN ASKED ACFT X TO SAY ALT AND HE CLAIMED FL280, THOUGH MODE C STILL INDICATE 900 FT HIGH. A COUPLE MINS AFTER THE 2 ACFT PASSED, ACFT X SHOWED LEVEL AT FL280. MYSELF, AS WELL AS OTHER ATC PERSONNEL INVOLVED IN THIS INCIDENT HAD THE FEELING THAT THE PLT WAS MISREPRESENTING HIS ACTUAL ALT. I WAS RELYING ON THE MIL PLT TO TAKE ACTION TO CORRECT THE APPARENT CONFLICT SINCE HE HAD THE BETTER PERFORMING ACFT AND SEEMED TO BE AT THE WRONG ALT. I WAS VERY DISMAYED TO SEE THAT HE TOOK NO EVASIVE ACTION WHATSOEVER AND CONTINUED DIRECTLY TOWARD THE TFC. ALSO VERY DISTURBING WAS THE LACK OF ACTION ON THE PART OF FAA PERSONNEL TO CHK OUT THE PLT'S CLAIMS OF ERRONEOUS MODE C TO DETERMINE IF THE PLT WAS RESPONSIBLE FOR CREATING THIS DANGEROUS SIT OR NOT.

Synopsis :

MIL T38 CLBED 900 FT ABOVE ASSIGNED ALT CAUSING AN ACR MD80 TO TAKE EVASIVE ACTION.

**Time**

Date : 199911  
Day : Thu  
Local Time Of Day : 1201 To 1800

**Place**

State Reference : TN  
Altitude.MSL.Single Value : 27000

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.ARTCC : ZTL.ARTCC  
Make Model : MD-11

**Aircraft / 2**

Controlling Facilities.ARTCC : ZTL.ARTCC

**Component / 1**

Aircraft Component : Air Data Computer  
Aircraft Reference : X  
Problem : Malfunctioning

**Person / 1**

Function.Flight Crew : First Officer  
Experience.Flight Time.Total : 8000  
Experience.Flight Time.Last 90 Days : 100  
Experience.Flight Time.Type : 1280  
ASRS Report : 454040

**Person / 2**

Function.Oversight : PIC  
Function.Flight Crew : Captain

**Person / 3**

Function.Oversight : Coordinator

**Person / 4**

Function.Controller : Radar

**Person / 5**

Function.Oversight : PIC

**Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Conflict : Airborne Less Severe  
Independent Detector.Aircraft Equipment : TCAS  
Independent Detector.Other.ControllerA : 4  
Resolatory Action.Flight Crew : Returned To Assigned Altitude  
Resolatory Action.Controller : Issued Advisory  
Consequence.Other : Maintenance Action

**Supplementary**

Problem Areas : Aircraft

Narrative :

FO FLYING AND TALKING TO ATC WHILE CAPT TALKED TO MAINT COORDINATOR TO TROUBLESHOOT FAILED CADC (CENTRAL AIR DATA COMPUTER) #2. AUTOPLT ON, LEVEL FL270. AT MAINT COORDINATOR'S SUGGESTION, FO SWITCHED BACK TO FAILED CADC WHICH GAVE US AN INACCURATE ALT READOUT OF FL273 WHICH RESULTED IN A TA TO DSND AND A CALL FROM ATC SAYING WE WERE 300 FT HIGH. WE DSND'D TO BE SAFE. WE THEN SWITCHED BACK TO CADC #1 AND THE FO ALT WENT FROM FL270 TO FL267. WE THEN CLBED BACK TO FL270. WE THEN RETURNED TO ATL BECAUSE OF EQUIP FAILURE.

Synopsis :

AN MD11 FO, PF, RPTED THAT THE CAPT WAS TROUBLESHOOTING A FAILED CADC #2, AND MOMENTARILY CAUSED A FALSE ALT READING, SETTING OFF THE TCASII AND PROMPTING ATC TO CALL.

## Time

Date : 199910

Day : Thu

Local Time Of Day : 0601 To 1200

## Place

State Reference : AL

Altitude.MSL.Single Value : 9000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.TRACON : P31.TRACON

Make Model : PA-31 Navajo Chieftan/Majave/Navajo

## Aircraft / 2

Make Model : Mentor (T-34)

## Person / 1

Function.Controller : Approach

ASRS Report : 454186

## Person / 2

Function.Flight Crew : Single Pilot

## Person / 3

Function.Flight Crew : Single Pilot

## Events

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : FAR

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 1

Independent Detector.Other.Flight CrewA : 2

Resolutory Action.Flight Crew : Took Evasive Action

Resolutory Action.Controller : Issued Advisory

## Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

PA31 AIRSPACE IS COMPRISED OF ALERT AREA 292. ACFT Y WAS SQUAWKING A BEACON CODE THAT INDICATED AEROBATIC ACTIVITY, BUT WAS NOT ACTUALLY IN THE ALERT AREA. ACFT X SAW THE AEROBATIC ACFT AFTER I MADE A TFC CALL, BUT BECAUSE OF THE AEROBATIC NATURE OF ACFT Y, ACFT X HAD TO TAKE EVASIVE ACTION. I THINK THESE AEROBATIC ACFT SHOULD REMAIN WITHIN THE ALERT AREA. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: RPTR ONLY ADDED THAT THE INCIDENT TOOK PLACE APPROX 2 MI SSE OF JKA ARPT AND THAT THIS TYPE OF INCIDENT OCCURS OFTEN.

Synopsis :

MIL T34 AT JKA CONDUCTING AEROBATIC MANEUVERS CAUSED A PA31 TO TAKE EVASIVE ACTION.

## Time

Date : 199911

Day : Mon

Local Time Of Day : 0601 To 1200

## Place

Locale Reference.Airport : ORD.Airport

State Reference : IL

Altitude.MSL.Bound Lower : 16000

Altitude.MSL.Bound Upper : 16200

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.ARTCC : ZAU.ARTCC

Make Model : Widebody, Low Wing, 2 Turbojet Eng

## Aircraft / 2

Controlling Facilities.ARTCC : ZAU.ARTCC

Make Model : Commercial Fixed Wing

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 13000

Experience.Flight Time.Last 90 Days : 300

Experience.Flight Time.Type : 4000

ASRS Report : 454206

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Radar

## Events

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Returned To Original Clearance

Resolatory Action.Flight Crew : Took Precautionary Avoidance Action

Resolatory Action.None Taken : Anomaly Accepted

Consequence.FAA : Reviewed Incident With Flight Crew

## Supplementary

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

ON THE PULLMAN ARR PASSING FL180, WE RECEIVED A TCASII TA FOLLOWED BY AN RA COMMANDING US TO REDUCE DSCNT RATE. WE COMPLIED WITH RA COMMAND AND LEVELED OFF AT OUR ASSIGNED ALT OF 16000 FT. ATC GAVE US A CLRNC TO DSND TO 10000 FT, BUT WE ALSO GOT A CLB RA. I INITIATED A CLB TO COMPLY WHILE MY FO TOLD ATC THAT WE WERE UNABLE TO COMPLY WITH DSCNT CLRNC. AN ACR Y FLT HDG SE CROSSED OUR FLT PATH CLOSE IN FRONT OF US AT OUR ALT. A FEW SECONDS AFTER THIS, WE RECEIVED A TCASII 'CLR OF CONFLICT.' WE QUESTIONED ATC, AND WERE TOLD THAT THE ACR Y FLT HAD US IN SIGHT AND HAD REQUESTED A VISUAL CLB. ATC HAD GRANTED THE REQUEST TELLING THE ACR Y FLT TO MAINTAIN VISUAL SEPARATION FROM US. THE ACR Y PLT RESPONDED TO US AND ATC THAT HE HAD MISJUDGED HIS RATE OF CLB AND HIS SEPARATION FROM OUR FLT, AND HE APOLOGIZED. THIS WAS TOO CLOSE AND SAFETY WAS COMPROMISED. THE PROB: 1) ATC GIVES VISUAL CLBS OR DSCNTS WITHOUT BOTH ACFT HAVING EACH OTHER IN SIGHT (ONLY 1 REQUIRED). 2) DIFFERENT CARRIERS HAVING DIFFERENT PROCS WHEN THEY RECEIVED TCASII RA. THIS TIME ONE CARRIER MUST FOLLOW RA COMMANDS, THE OTHER CARRIER IS CAPT'S DISCRETION. THESE 2 PROBS MUST BE CORRECTED BEFORE IT IS TOO LATE.

Synopsis :

FLC OF A WDB CLBED IN RESPONSE TO A TCASII RA DURING A STAR ARR RESULTING IN A CRITICAL AIRBORNE CONFLICT. THE OTHER ACFT WAS INSTRUCTED BY THE ARTCC CTLR TO MAINTAIN VISUAL SEPARATION WITH RPTR'S ACFT DURING THEIR CLB.



## Time

Date : 199911

Day : Fri

Local Time Of Day : 1801 To 2400

## Place

State Reference : VA

Altitude.MSL.Single Value : 15700

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.ARTCC : ZDC.ARTCC

Make Model : B727 Undifferentiated or Other Model

## Aircraft / 2

Controlling Facilities.ARTCC : ZDC.ARTCC

Make Model : Jetstream Series Commuter Acft

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 11000

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 1100

ASRS Report : 454267

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Flight Crew : Second Officer

Experience.Flight Time.Total : 2600

Experience.Flight Time.Last 90 Days : 40

Experience.Flight Time.Type : 500

ASRS Report : 454444

## Person / 4

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 5

Function.Controller : Radar

## Events

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Took Evasive Action

## Supplementary

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

LEVEL AT 14000 FT MSL, TFC WAS POINTED OUT TO US BY ZDC AT 15000 FT. WE RPTED TFC IN SIGHT AT ABOUT 18 MI AS IT WAS A CLR NIGHT. APPROX 5 MI LATER, CTLR ASKED IF WE STILL HAD TFC AND WE RESPONDED IN THE AFFIRMATIVE. HE THEN GAVE US A CLB TO FL200. OUT OF ABOUT 14500 FT OR SO, WE REALIZED THE TFC WAS COMING TOWARD US. WE PREVIOUSLY THOUGHT HE WAS SAME DIRECTION. THEN THE TCASII WAS ISSUING A DSND COMMAND, BUT OUR CLOSURE RATE WAS SUCH THAT I FEARED THAT THE PARABOLA NECESSARY TO TRANSITION BACK TO A DSCNT WOULD CAUSE US TO HIT AS WE WERE CLBING ABOUT 2000 FPM. INSTEAD, WE INCREASED CLB TO ABOUT 3500 FPM AND FLEW OVER THE TFC BY APPROX 700 FT. I FEEL THAT OUR BELIEF THAT THE TFC WAS GOING IN OUR SAME DIRECTION STARTED THE CHAIN OF EVENTS. HAD WE KNOWN HE WAS OPPOSITE DIRECTION WE WOULD HAVE REFUSED THE CLB CLRNC. THE TCASII RA SEEMED TO DELAY MORE THAN NORMAL, OR AT THE VERY LEAST SEEMED TO DIRECT A DSCNT WHEN A CLB SEEMED MORE APPROPRIATE. THE FACT THAT THE CTLR NEVER ASKED US TO EXPEDITE OUR CLB MADE ME FEEL AS THOUGH HE MAY NOT HAVE REALIZED WE WOULD PASS THE OTHER ACFT SO CLOSELY.

Synopsis :

A B727 IGNORED A TCASII RA DSND ADVISORY AND PASSED OVER THE OTHER ACFT BY 700 FT NEAR RIC.

**Time**

Date : 199911  
Day : Sun  
Local Time Of Day : 1201 To 1800

**Place**

Locale Reference.Airport : BFI.Airport  
State Reference : WA  
Altitude.MSL.Single Value : 8000

**Environment**

Flight Conditions : Mixed

**Aircraft / 1**

Controlling Facilities.TRACON : S46.TRACON  
Make Model : B757-200

**Aircraft / 2**

Controlling Facilities.TRACON : S46.TRACON  
Make Model : Commercial Fixed Wing

**Person / 1**

Function.Oversight : PIC  
Function.Flight Crew : Captain  
Experience.Flight Time.Total : 8500  
Experience.Flight Time.Last 90 Days : 60  
Experience.Flight Time.Type : 400  
ASRS Report : 454310

**Person / 2**

Function.Flight Crew : First Officer

**Person / 3**

Function.Oversight : PIC  
Function.Flight Crew : Captain

**Person / 4**

Function.Controller : Approach

**Events**

Anomaly.Other Spatial Deviation : Track Or Heading Deviation  
Anomaly.Conflict : NMAC  
Anomaly.Non Adherence : Clearance  
Anomaly.Non Adherence : FAR  
Anomaly.Other Anomaly : Speed Deviation  
Independent Detector.Aircraft Equipment : TCAS  
Independent Detector.Other.ControllerA : 4  
Independent Detector.Other.Flight CrewA : 1  
Resolatory Action.Controller : Issued Advisory  
Resolatory Action.Controller : Issued New Clearance  
Resolatory Action.None Taken : Detected After The Fact

**Supplementary**

Problem Areas : ATC Human Performance  
Problem Areas : Environmental Factor  
Problem Areas : Flight Crew Human Performance

Narrative :

DURING APCH TO BOEING FIELD, THE CTLR CLRED ME TO TURN TO A HDG OF 190 DEGS (FROM 250 DEGS). I THOUGHT HE SAID SLOW TO 190 KTS, WHICH I REPEATED BACK TO HIM. AFTER A BRIEF PERIOD, THE CTLR ASKED MY HDG AND I SAID 250 DEGS. HE REPLIED THAT WE WERE INSTRUCTED TO TURN TO 190 DEGS. HE THEN CLRED ME TO A HDG OF 150 DEGS AND A DSCNT. THIS TURN/DSCNT PRODUCED A TCASII ADVISORY WITH CONFLICTING TFC. WE WERE THEN INSTRUCTED TO TURN BACK TO 250 DEGS. THE FLT CONTINUED WITHOUT FURTHER INCIDENT. THERE WAS A LOT OF RADIO TFC DURING THE APCH. THE CTLR WAS TALKING RAPIDLY TO SEVERAL ACFT. HIS WORKLOAD APPEARED TO BE HIGH -- AS WAS OURS. I WAS DISTR AT THE MOMENT THE CTLR ISSUED THE HDG CHANGE TO 190 DEGS AND ONLY HEARD THE NUMBER 190 ALONG WITH MY CALL SIGN. I READ BACK THE AIRSPD CHANGE TO 190 AND ASSUMED 'NO RESPONSE' MEANT MY READBACK WAS CORRECT.

Synopsis :

B757 MISTOOK HDG ASSIGNMENT FOR AIRSPD ASSIGNMENT. APCH CTLR MISSED INCORRECT READBACK. TCASII ADVISORY RESULTS.

**Time**

Date : 199911  
Day : Thu  
Local Time Of Day : 1201 To 1800

**Place**

Locale Reference.Airport : ATL.Airport  
State Reference : GA  
Altitude.MSL.Single Value : 6000

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.TRACON : ATL.TRACON  
Make Model : Falcon 20FJF/20C/20D/20E/20F

**Aircraft / 2**

Controlling Facilities.TRACON : ATL.TRACON  
Make Model : B737 Undifferentiated or Other Model

**Person / 1**

Function.Flight Crew : First Officer  
Experience.Flight Time.Total : 12565  
Experience.Flight Time.Last 90 Days : 80  
Experience.Flight Time.Type : 1035  
ASRS Report : 454409

**Person / 2**

Function.Oversight : PIC  
Function.Flight Crew : Captain  
Experience.Flight Time.Total : 11000  
Experience.Flight Time.Last 90 Days : 90  
Experience.Flight Time.Type : 800  
ASRS Report : 454834

**Person / 3**

Function.Oversight : PIC  
Function.Flight Crew : Captain

**Person / 4**

Function.Controller : Approach

**Events**

Anomaly.Conflict : Airborne Less Severe  
Independent Detector.Aircraft Equipment : TCAS  
Independent Detector.ATC Equipment.Other ATC Equipment : Radar  
Independent Detector.Other.ControllerA : 4  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolutory Action.Flight Crew : Took Precautionary Avoidance Action  
Resolutory Action.Controller : Issued Advisory  
Resolutory Action.Controller : Issued New Clearance  
Resolutory Action.Controller : Separated Traffic

**Supplementary**

Problem Areas : ATC Human Performance  
Problem Areas : Flight Crew Human Performance

Narrative :

WE WERE EBOUND ON A R DOWNWIND LEG, VECTORS FOR THE ILS TO RWY 26R AT ATL, AND DSNDING TO 5000 FT AS ASSIGNED BY ATC. OUT OF APPROX 6500 FT, THE TCASII ISSUED A TA FOR TFC AT OUR 9:30 O'CLOCK POS. WE ESTABLISHED VISUAL CONTACT WITH ACFT Y PAX JET AT APPROX 2 1/2 MI AND 400 FT BELOW US. I BELIEVE IT WAS A B737. WE STOPPED THE DSCNT. AT THE SAME TIME, ATL APCH ORDERED US TO LEVEL AT 6000 FT AND TURN R TO A HDG OF 130 DEGS. UPON LEVELING AT 6000 FT, THE TCASII ISSUED A 'CLB' RA. SINCE WE HAD VISUAL CONTACT WITH THE OTHER ACFT, AND IT WAS CLR THEY WOULD DSND BELOW US, WE MAINTAINED 6000 FT. ACFT Y WAS ON A HDG OF APPROX 180 DEGS. THEY WERE ALSO DSNDING. THE TCASII WAS THE FIRST WARNING OF AN IMPENDING CONFLICT. ITS VALUE CANNOT BE OVERSTATED. THE TA GAVE US TIME TO EVALUATE AND RESOLVE A DEVELOPING TFC PROB. A CORRECT AND TIMELY RA WAS ISSUED WHICH WOULD HAVE PREVENTED A CLOSE CALL OR WORSE, HAD WE BEEN UNABLE TO ESTABLISH VISUAL CONTACT. SUPPLEMENTAL INFO FROM ACN 454834: I BELIEVE THE AIRLINER WAS SLOW IN ITS DSCNT, AND APCH CTL DIDN'T CATCH THE POSSIBLE CONFLICT.

Synopsis :

FLC OF A CPR FALCON 20F DID NOT RESPOND TO A TCASII RA DURING VECTORS TO THE ILS SINCE APCH CTRLR HAD PROVIDED A TA, DSCNT LEVELOFF AND TURN TO ASSURE TFC SEPARATION. IN ADDITION, THE FLC HAD THE B737 SIGHTED.

## Time

Date : 199911

Day : Sat

Local Time Of Day : 0601 To 1200

## Place

State Reference : CA

Altitude.MSL.Bound Lower : 9800

Altitude.MSL.Bound Upper : 11000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.TRACON : SCT.TRACON

Make Model : B757-200

## Aircraft / 2

Controlling Facilities.TRACON : SCT.TRACON

Make Model : Small Aircraft, Low Wing, 1 Eng, Fixed Gear

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 11000

Experience.Flight Time.Last 90 Days : 255

Experience.Flight Time.Type : 7000

ASRS Report : 454446

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Flight Crew : Single Pilot

## Person / 4

Function.Controller : Approach

## Events

Anomaly.Conflict : NMAC

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 4

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Controller : Issued Alert

## Supplementary

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

WHILE DSNDING ON THE CIVIT 4 ARR INTO LAX, WE WERE GIVEN A FREQ CHANGE TO SOCAL APCH. AFTER CHKING ON, WE WERE GIVEN A TA, VFR TFC AT OUR 10 O'CLOCK POS LESS THAN 3 MI AT 10500 FT UNVERIFIED. WE WERE AT 11000 FT DSNDING TO CROSS ARNES INTXN AT 10000 FT. OUR TCASII SHOWED THE TFC AT ABOUT THE SAME TIME AS APCH HAD POINTED IT OUT TO US. APCH TOLD US TO STOP OUR DSCNT, WHICH WE COMPLIED WITH. WITHIN APPROX 5 SECONDS WE RECEIVED A TA ON OUR TCASII FOLLOWED VERY QUICKLY BY AN RA INDICATING A DSCNT WAS REQUIRED TO AVOID THE TFC. IMMEDIATELY THE AUTOPLT WAS DISCONNECTED, THRUST LEVERS RETARDED AND THE SPD BRAKES FULLY EXTENDED WITH A VERY POSITIVE FORWARD PRESSURE PLACED ON THE CTL WHEEL. WHEN WE FINALLY SAW THE TFC IT WAS PASSING ABOVE THE FLT DECK AT A DISTANCE OF LESS THAN 200 FT. IT WAS A SINGLE ENG LOW WING ACFT. WE ADVISED APCH THAT THE TFC PASSED AT A VERY CLOSE PROX TO US.

Synopsis :

A B757 CAPT ON THE CIVET 4 STAR INTO LAX EXPERIENCED AN NMAC WITH A SMALL ACFT.



**Time**

Date : 199911  
Day : Sun  
Local Time Of Day : 1801 To 2400

**Place**

Locale Reference.Airport : HNL.Airport  
State Reference : HI  
Altitude.MSL.Single Value : 3800

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.TRACON : HNL.TRACON  
Make Model : DC-10 30f

**Aircraft / 2**

Controlling Facilities.TRACON : HNL.TRACON  
Make Model : DC-9 Undifferentiated or Other Model

**Person / 1**

Function.Oversight : PIC  
Function.Flight Crew : Captain  
Experience.Flight Time.Total : 11500  
Experience.Flight Time.Last 90 Days : 50  
Experience.Flight Time.Type : 1500  
ASRS Report : 454450

**Person / 2**

Function.Flight Crew : First Officer

**Person / 3**

Function.Flight Crew : Second Officer

**Person / 4**

Function.Oversight : PIC  
Function.Flight Crew : Captain

**Person / 5**

Function.Controller : Departure

**Events**

Anomaly.Conflict : Airborne Critical  
Anomaly.Non Adherence : Required Legal Separation  
Independent Detector.Aircraft Equipment : TCAS  
Independent Detector.Other.Flight CrewA : 1  
Independent Detector.Other.Flight CrewB : 2  
Resolatory Action.Flight Crew : Took Evasive Action

**Supplementary**

Problem Areas : ATC Human Performance  
Problem Areas : FAA  
Problem Areas : Flight Crew Human Performance

Narrative :

THE FO CONTACTED HNL DEP 118.3 AT APPROX 1500 FT AGL, WHILE WE WERE IN A R TURN TO A 155 DEG HDG. DEP CTL INSTRUCTED US TO TURN L TO A 140 DEG HDG FOR TFC AND CLB MAINTAIN FL280. DEP CTL THEN ASKED US IF WE HAD THE TFC IN SIGHT AT 10-12 O'CLOCK POS AT 5000 FT. WE CONFIRMED THE TFC VISUALLY AND ON TCASII AT 1200 FT ABOVE DSNDING. DEP CTL REPLIED OUR ALT WAS 3800 FT CLBING, 'MAINTAIN VISUAL SEPARATION.' WHEN THE DC9 APCHED IT WAS STILL DSNDING TOWARD OUR ALT THE TCASII REPLIED 'TFC TFC.' ALMOST IMMEDIATELY THE TCASII RA ISSUED A 'CLB, CLB, CLB' WARNING AND THE RED ARC ON THE VSI WAS FROM 0-1000 FT UP. I PITCHED UP TO 1200-1500 FT ON THE VSI. THE RA WAS A SOLID RED SQUARE AND 300 FT DSNDING. SHORTLY AFTER PASSING 4000-4200 FT, THE TCASII REPLIED 'CLR OF CONFLICT.' AFTER PASSING 10000 FT, THE FO TOOK CTL OF THE ACFT AND THE CAPT RETURNED TO THE DP CTL FREQ AND TOLD THE CTLR THAT THE TFC HAD BEEN VERY CLOSE, AND QUESTIONED WHETHER HE OR THE DC9 HAD INDICATED A TFC CONFLICT. HE REPLIED 'NEGATIVE.' I THEN HEARD THE DC9 QUESTION THE CTLR AS TO WHAT ALT HE HAD BEEN CLRED TO AND THE CTLR RESPONDED '3000 FT'. THE REST OF THE FLT WAS NORMAL, AS WAS THE APCH AND LNDG. POSTFLT INSPECTION BY THE FE AND ONBOARD FLT MECH, REVEALED NOTHING UNUSUAL. THE ACFT THEN FLEW WFFN-YSSY (DIFFERENT CREW). ELEVATOR DAMAGE -- NOTED ON POSTFLT INSPECTION IN YSSY.

Synopsis :

DC10 CREW HAD TCASII RA ON DEP IN HNL CLASS B.

## Time

Date : 199911

Day : Mon

Local Time Of Day : 1201 To 1800

## Place

Locale Reference.Airport : LAX.Airport

State Reference : CA

Altitude.MSL.Bound Lower : 6700

Altitude.MSL.Bound Upper : 7000

## Environment

Flight Conditions : VMC

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 14000

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 5000

ASRS Report : 454671

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Approach

## Events

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Non Adherence : Company Policies

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Took Precautionary Avoidance Action

## Situations

Aircraft.Aircraft Component.Value : 34.352

## Supplementary

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

WE WERE ON ILS RWY 24L. BRASILIA WAS ON ILS RWY 24R. BRASILIA WAS AT OUR 4 O'CLOCK POS AND ABOUT 50 FT HIGHER THAN US. TCAS II CALLED, 'TFC, TFC.' A MOMENT LATER TCAS II CALLED, 'CLB, CROSSING, CLB.' THE CO-PLT SAID, 'DON'T CLB OR WE WILL HIT HIM!' WE DESCENDED AND TCAS II CALLED, 'CLR OF CONFLICT.' WE MANEUVERED OPPOSITE TO TCAS II BECAUSE THE CO-PLT HAD VISUAL CONTACT WITH THE BRASILIA.

Synopsis :

FLC OF A B737-300 DESCENDED IN RESPONSE TO A TCAS II RA WHICH WAS THE DIRECT OPPOSITE DIRECTION GIVEN BY A TCAS II RA DUE TO HAVING THE INTRUDER EMB120 ACFT IN SIGHT.

**ACN: 454741**

### **Time**

Date : 199911

Day : Sat

Local Time Of Day : 0001 To 0600

### **Place**

State Reference : AZ

Altitude.MSL.Single Value : 5900

### **Environment**

Flight Conditions : VMC

### **Aircraft / 1**

Controlling Facilities.Tower : TUS.Tower

Make Model : A320

### **Aircraft / 2**

Make Model : Any Unknown or Unlisted Aircraft Manufacturer

### **Person / 1**

Function.Controller : Local

Function.Controller : Supervisor

ASRS Report : 457741

### **Person / 2**

Function.Oversight : PIC

Function.Flight Crew : Captain

### **Person / 3**

Function.Flight Crew : First Officer

### **Events**

Anomaly.Other Spatial Deviation : Controlled Flight Towards Terrain

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 1

Independent Detector.Other.Flight CrewA : 2

Independent Detector.Other.Flight CrewB : 3

Resolatory Action.Flight Crew : Took Evasive Action

Resolatory Action.Controller : Issued Advisory

Narrative :

THE AIRBUS WAS 5900 FT ON VISUAL APCH OVER MOUNTAINOUS TERRAIN WHEN IT RECEIVED A TA AND RA TO DSND. THE PLT ADVISED HE WAS DSNDING BECAUSE OF TCASII RA. THE CTLR ISSUED THE MVA OF 5700 FT. THE AIRBUS STOPPED DSCNT AT 5600 FT WHEN THE RA CEASED. THERE WAS NO KNOWN OR OBSERVED TFC NEAR THE AREA.

Synopsis :

TUS ATCT CTLR RECEIVED CALL FROM AN A320 PLT AT 5900 FT RESPONDING TO A TCASII RA TO DSND. MVA WAS 5700 FT AND THE PLT DSNDDED TO 5600 FT.

## Time

Date : 199911

Day : Mon

Local Time Of Day : 1801 To 2400

## Place

State Reference : PA

Altitude.MSL.Bound Lower : 8000

Altitude.MSL.Bound Upper : 9000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.ARTCC : ZNY.ARTCC

Make Model : Dash 8 Series Undifferentiated or Other Model

## Aircraft / 2

Controlling Facilities.ARTCC : ZNY.ARTCC

Make Model : B737 Undifferentiated or Other Model

## Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 2800

Experience.Flight Time.Last 90 Days : 250

Experience.Flight Time.Type : 600

ASRS Report : 454759

## Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Radar

## Events

Anomaly.Conflict : NMAC

Anomaly.Non Adherence : Clearance

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Took Evasive Action

## Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

ZNY CALLED TFC AT 10 O'CLOCK, 5 MI. I WAS PNF. I INDICATED NEGATIVE CONTACT, ONE AT 11 O'CLOCK -- HE POINTED HIM OUT. PF POINTED TO HIM, SO I 'FIGURED' HE HAD THE TFC. I INDICATED TO ARTCC WE HAD VISUAL CONTACT (WE SAW HIS LNDG LIGHTS BLAZING). ARTCC SAID MAINTAIN VISUAL SEPARATION AND I THINK SOMETHING TO THE EFFECT OF DSNDING HIM THROUGH OUR ALT, WE WERE CLRED TO CLB. CLOSING QUICKLY, WE GOT A TCASII TA BUT I STILL BELIEVED THE PF HAD TFC. HE WAS HAND FLYING, NOT USING AUTOPLT, SO ATTN WAS INSIDE MORE THAN OUTSIDE. I DIDN'T GET A DEFINITIVE RESPONSE. THEN TCASII RA 'DSND, DSND' ACFT WAS 1/2 MI, 200 FT ABOVE. THE CAPT KEPT CLBING, LOOKING OUT WINDOW, THEN TURNING R. I KEPT ASKING 'YOU GOT HIM?' HE WAS OFF L SIDE, SO I COULD NOT SEE. ALL I SAW WAS TCASII SHOWING +02, +01, 00! AND TARGET WAS RIGHT ON OUR MINIATURE AIRPLANE SYMBOL. BY THIS TIME, HE HAD PULLED THE PWR LEVERS TO FLT IDLE! THAT'S IT. I DIDN'T KNOW IF HE HAD THE TFC OR NOT, SO I PUSHED THE YOKE UNTIL WE GOT A GOOD DSCNT GOING AND I SAW +01, +02, +03, THEN LET OFF THE YOKE PRESSURE. LATER HE TOLD ME HE DIDN'T EVEN FEEL ME DO THAT. ACCIDENT WAS AVOIDED -- TOO CLOSE, THOUGH. HE SAID HE WAS ANGRY SINCE HE 'NEVER' CALLS TFC TO ATC. THAT'S THEIR JOB. TO SOME DEG, I AGREE, BUT WE SAW THE OTHER ACFT. BUT MY MISTAKE WAS CALLING TFC AND ACCEPTING VISUAL SEPARATION WITHOUT CAPT'S CONCURRENCE. I WILL ASK FUTURE PLTS THAT I FLY WITH HOW THEY WISH TO HANDLE ATC TA'S. AS A NOTE: PF (CAPT) SAID 'I'M BAD LUCK THINGS HAPPEN TO ME (WHAT THE %\$#@ IS THAT?) HE TOOK NO PROACTIVE ACTION. I HAD TO PUSH THE YOKE MY HUMAN FACTOR I MENTIONED HIS IS APPARENT.

Synopsis :

A DEHAVILLAND DASH 8 HAD AN NMAC NEAR HAR.



## Time

Date : 199911

Day : Mon

Local Time Of Day : 0601 To 1200

## Place

State Reference : NY

Altitude.MSL.Single Value : 12500

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.ARTCC : ZBW.ARTCC

Make Model : Fokker 100

## Aircraft / 2

Controlling Facilities.ARTCC : ZBW.ARTCC

Make Model : Any Unknown or Unlisted Aircraft Manufacturer

## Person / 1

Function.Controller : Radar

Experience.Flight Time.Total : 530

ASRS Report : 454763

## Person / 2

Function.Controller : Radar

ASRS Report : 454762

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Flight Crew : First Officer

## Events

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Published Procedure

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 3

Independent Detector.Other.Flight CrewB : 4

Resolutory Action.Flight Crew : Took Evasive Action

## Supplementary

Problem Areas : ATC Human Performance

Narrative :

THE RADAR CTLR WAS TALKING TO ACR X ON A PAX FLT FROM ORD TO HPN. THE ACFT WAS DSNDING ON THE VALRE 2 ARR. AS THE ACFT APCHED THE WEARD INTXN THE PLT ADVISED HE WAS RESPONDING TO AN RA FROM HIS TCASII. THE ONLY TARGET ON THE SCOPE HAD NO ALT RPTING. WE SOON FOUND THE #2 ACFT IN THIS INCIDENT WAS BEING SUPPRESSED IN THE CONFLICT ALERT LIST FROM AN ALERT WITH ANOTHER ACFT. SUPPRESSING THIS ALERT HAD STOPPED A MODE C READOUT FROM THE VFR ACFT ON BOTH OF THE SCOPES I WAS WORKING WITH AS WELL AS THE SCOPE OF THE CTLR THAT HAS GIVEN US THE ACR X ACFT. WHEN THE CONFLICT ALERT SUPPRESSION WAS DEACTIVATED, THE MODE C OF THE VFR ACFT, (ACFT Y), CAME ON TO BOTH SCOPES WITH THE ALT SHOWING WITHIN 200 FT OF ACR X AND WELL WITHIN 1 MI. BY THIS TIME THE PLT OF ACR X HAD ALREADY TAKEN ACTION TO AVOID THE COLLISION. THIS CONFLICT ALERT PROB SEEMS TO BE A KNOWN PROB WITH THE NEWLY INSTALLED DSR EQUIP. THIS HAS HAPPENED TO ME BEFORE, BUT THIS IS THE CLOSEST I HAVE HAD 2 ACFT COME TOGETHER TO DATE. SUPPLEMENTAL INFO FROM ACN 454762: I WAS WORKING THE RADAR ASSOCIATE POS AT A SECTOR WHEN WE HAD XFERRED CTL AND COM OF ACR X. THE ADJOINING SECTOR HAD SUPPRESSED CONFLICT ALERT ON ACFT Y FOR ANOTHER ACFT. THIS CAUSED THE MODE C OF ACFT Y TO DISAPPEAR FROM OUR RADAR SCOPE (A KNOWN PROB WITH THE NEW DSR EQUIP). NOT KNOWING THE ALT OF ACFT Y WE DID NOT NOTIFY THE NEXT SECTOR OF A POTENTIAL CONFLICT WITH ACR X. A TCASII RA WAS INITIATED BY ACR X, WHICH PREVENTED A POSSIBLE MIDAIR COLLISION.

Synopsis :

AN F100 WITH ZBW CTLR HAS A TCASII RA DURING DSCNT AND TAKES EVASIVE ACTION. THE INTRUDER TFC WAS VFR WITH AN ADJACENT SECTOR WITH ALT SUPPRESSED.

**Time**

Date : 199911

Day : Tue

Local Time Of Day : 1201 To 1800

**Place**

State Reference : WI

Altitude.MSL.Bound Lower : 5700

Altitude.MSL.Bound Upper : 6400

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.ARTCC : ZMP.ARTCC

Make Model : Atp Advanced Turboprop

**Aircraft / 2**

Controlling Facilities.ARTCC : ZMP.ARTCC

Make Model : PA-28 Cherokee/Archer II/Dakota/Pillan/Warrior

**Person / 1**

Function.Controller : Radar

ASRS Report : 454945

**Person / 2**

Function.Oversight : PIC

Function.Flight Crew : Captain

**Person / 3**

Function.Flight Crew : First Officer

**Person / 4**

Function.Flight Crew : Single Pilot

**Events**

Anomaly.Other Spatial Deviation : Track Or Heading Deviation

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Conflict : Airborne Less Severe

Anomaly.Non Adherence : Clearance

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolutive Action.Controller : Issued Advisory

**Situations**

Aircraft.Aircraft Component.Value : 34.352

**Supplementary**

Problem Areas : Aircraft

Problem Areas : Flight Crew Human Performance

Narrative :

ACFT X WAS LEVEL AT 6000 FT SBOUND. ACFT Y WAS LEVEL AT 6400 FT NWBOUND RECEIVING VFR TA'S. I ISSUED A TA TO ACFT X AS '12 O'CLOCK, 1 1/2 MI, 6400 FT, A PIPER CHEROKEE.' ACFT X RESPONDED THAT HE WAS IN A DSCNT AND A R-HAND TURN BECAUSE OF A TCASII RA. THIS SIT IS A GOOD EXAMPLE OF A SIT WHERE THE 2 ACFT WERE SEPARATED AND IN A SAFE ENVIRONMENT, AND THEN TCASII MADE IT A POTENTIALLY UNSAFE ENVIRONMENT BY DIRECTING A TURN AND DSCNT. THERE COULD HAVE BEEN TFC BELOW THAT WE DID NOT KNOW ABOUT BECAUSE OF MARGINAL RADAR COVERAGE.

Synopsis :

ARTCC CTLR ISSUED ADVISORIES TO AN IFR BRITISH ATP AND A VFR PIPER PA28 WHICH WERE SEPARATED ON THEIR PRESENT COURSE AND ALT. HOWEVER, THE ATP CREW HAD ALREADY DSNDED AND TURNED IN RESPONSE TO A TCASII RA. CTLR BELIEVES THAT TCASII IN THIS INCIDENT CAUSED AN UNSAFE CONDITION IN LIEU OF PREVENTING ONE.

**Time**

Date : 199911  
Day : Wed  
Local Time Of Day : 0601 To 1200

**Place**

Locale Reference.Airport : MSP.Airport  
State Reference : MN  
Altitude.MSL.Single Value : 7000

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.TRACON : M98.TRACON  
Make Model : A320

**Aircraft / 2**

Controlling Facilities.TRACON : M98.TRACON  
Make Model : B737 Undifferentiated or Other Model

**Person / 1**

Function.Oversight : PIC  
Function.Flight Crew : Captain  
Experience.Flight Time.Total : 16500  
Experience.Flight Time.Last 90 Days : 150  
Experience.Flight Time.Type : 95  
ASRS Report : 454990

**Person / 2**

Function.Flight Crew : First Officer  
Experience.Flight Time.Total : 7000  
Experience.Flight Time.Last 90 Days : 150  
Experience.Flight Time.Type : 150  
ASRS Report : 455729

**Person / 3**

Function.Oversight : PIC  
Function.Flight Crew : Captain

**Person / 4**

Function.Controller : Approach

**Events**

Independent Detector.Aircraft Equipment : TCAS  
Resolatory Action.Other : Retuned Radio

**Supplementary**

Problem Areas : Flight Crew Human Performance

Narrative :

AT 7000 FT ON APCH WE WERE BEING VECTORED TO A DOWNWIND BEHIND ACFT Y, A B737. THE CTLR TOLD US TO KEEP THE B737 IN SIGHT AND THAT WE WOULD BE FOLLOWING HIM FOR THE VISUAL APCH TO RWY 12R. HE THEN GAVE US A FREQ CHANGE THAT I MISTAKENLY THOUGHT WAS THE TWR. WE BOTH COMMENTED THAT THIS SEEMED EARLY TO SWITCH TO THE TWR FREQ. WE CONTINUED BEHIND (ON DSNDING TO 5000 FT ON DOWNWIND). WE CALLED THE MSP TWR WITH NO RESPONSE UNTIL THE SECOND CALL. THAT IS WHEN THE TWR TOLD US WE WERE SUPPOSED TO BE ON 126.95 INSTEAD OF 126.7. WE WENT BACK TO 126.95 AND WERE TOLD TO STAY AT 5000 FT AND A HDG OF 300 DEGS FOR VECTORS TO FINAL. WE TOLD THE CTLR THAT WE HAD MISTAKENLY SWITCHED TO TWR FREQ BECAUSE WE THOUGHT THAT IS WHAT THE LAST CTLR ASSIGNED US ALONG WITH CLRNC FOR THE VISUAL APCH. HIS COMMENTS WERE THAT HE WONDERED WHERE WE WERE AND THAT THERE WAS NO PROB. WE WERE BEING VECTORED A LITTLE DIFFERENTLY THAN NORMAL FOR SPACING. JUST BEFORE WE GOT THE FREQ CHANGE, OUR TCASII SAID 'TFC, TFC.' IT WAS THE ACFT WE WERE BEING VECTORED BEHIND. THIS EVENT SHOWS HOW HUMAN ERROR FOR WHATEVER REASON CAN BEGIN THE CHAIN OF EVENTS THAT NEEDS TO BE BROKEN.

Synopsis :

AN AIRBUS FLC WAS ON THE WRONG FREQ WHEN DOWNWIND FOR THE MSP ARPT. DURING THIS TIME A TCASII TA WAS RECEIVED FROM THE PRECEDING ACFT.

## Time

Date : 199911

Day : Thu

Local Time Of Day : 1201 To 1800

## Place

Locale Reference.Airport : STL.Airport

State Reference : MO

Altitude.AGL.Bound Lower : 1000

Altitude.AGL.Bound Upper : 1500

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.Tower : STL.Tower

Make Model : B737-200

## Aircraft / 2

Make Model : Baron 55/Cochise

## Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 4500

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 200

ASRS Report : 455045

## Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 3

Function.Flight Crew : Single Pilot

## Person / 4

Function.Controller : Local

## Events

Anomaly.Airspace Violation : Entry

Anomaly.Conflict : NMAC

Anomaly.Non Adherence : FAR

Independent Detector.Aircraft Equipment : GPWS

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Took Evasive Action

Consequence.FAA : Investigated

## Supplementary

Problem Areas : Flight Crew Human Performance

Narrative :

AT APPROX XA00 WE WERE ISSUED A TKOF CLRNC FROM STL TWR FROM RWY 30L, TO FLY HDG 340 DEGS, CLB AND MAINTAIN 5000 FT. SHORTLY AFTER TKOF AT APPROX 1500 FT AGL, WE RECEIVED A 'TFC, TFC' TA FOLLOWED BY A 'DSND, DSND, DSND' RA. AS THE PF, I RESPONDED WITH A REVERSAL FROM A 1500 FPM CLB TO A 2000 FPM DSCNT TO MEET THE RA RESPONSE REQUIRED. SECONDS AFTER, WE RECEIVED A GPWS 'TERRAIN, TERRAIN' WARNING, AT WHICH TIME I STOPPED THE DSCNT AND STARTED A CLB WITH THE TERRAIN IN SIGHT. THE CAPT ADVISED ATC OF THE NMAC AND ATC ISSUED A CLRNC TO CLB TO 6000 FT R TURN TO 360 DEGS. I DID SEE THE INTRUDER ACFT AFTER BEGINNING THE DSCNT. ATC ADVISED THEY WOULD BE LOOKING INTO THE INCIDENT. I BELIEVE THE CREW RESPONDED PROPERLY AND THAT TCASII AND GPWS WORKED WELL IN INCREASING THE LEVEL OF SAFETY. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING INFO: THE RPTR STATES THE INTRUDING ACFT HAD DEPARTED A NEARBY ARPT AND WAS ATTEMPTING RADIO CONTACT WITH THE STL TWR. IT IS UNKNOWN IF THE TWR HAD RADAR CONTACT WITH THE INTRUDING ACFT. ACCORDING TO RPTS GIVEN TO ONE OF THE CREW MEMBERS, THE INTRUDING ACFT CAME WITHIN 810 FT HORIZ AND 400 FT VERT.

Synopsis :

A FLC RECEIVED A TCASII RA ON DEP FROM STL.



## Time

Date : 199911

Day : Thu

Local Time Of Day : 1201 To 1800

## Place

State Reference : KS

Altitude.MSL.Single Value : 15000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.ARTCC : ZKC.ARTCC

Make Model : Medium Large Transport, Low Wing, 2 Turbojet Eng

## Aircraft / 2

Controlling Facilities.ARTCC : ZKC.ARTCC

Make Model : Commercial Fixed Wing

## Person / 1

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 9000

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 650

ASRS Report : 455194

## Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Radar

## Events

Anomaly.Conflict : Airborne Critical

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolutive Action.Flight Crew : Took Evasive Action

## Supplementary

Problem Areas : ATC Human Performance

Narrative :

WERE LEVELING AT 15000 FT AT SWITCH OVER TO ZKC. REQUESTING HIGHER ALT FROM ZKC WHEN WE ENCOUNTERED TFC COMING FROM R AND XING OUR PATH AT 15000 FT, TCASII RA TO CLB. ADDED PWR AND CLBED. RA RESET AT 15900 FT. BEGAN DSCNT BACK TO 15000 FT SINCE ZKC HAD NOT RESPONDED TO OUR CALL. AS WE WERE DSNDING BACK TO 15000 FT, ZKC RESPONDED TO OUR CALL. CAPT NOTIFIED ZKC OF CONFLICT AND ALT, AND NEED TO CLB. ZKC CTLR RESPONDED THAT HE WAS WORKING ON A HIGHER ALT FOR US WHEN WE CALLED. CTLR'S VOICE INDICATED HE WAS EMBARRASSED BY THE INCIDENT. THE CTLR GAVE US A HIGHER ALT. NO FURTHER CONFLICT AND DID NOT NOTICE TYPE OF OTHER ACFT.

Synopsis :

A FLC RECEIVED A TCASII RA NEAR ICT.

## Time

Date : 199911

Day : Thu

Local Time Of Day : 1201 To 1800

## Place

State Reference : FL

Altitude.MSL.Single Value : 33000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.ARTCC : ZMA.ARTCC

Make Model : MD-82

## Aircraft / 2

Controlling Facilities.ARTCC : ZMA.ARTCC

Make Model : Any Unknown or Unlisted Aircraft Manufacturer

## Person / 1

Function.Flight Crew : First Officer

ASRS Report : 455318

## Person / 2

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Radar

## Person / 5

Function.Controller : Supervisor

## Events

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Conflict : Airborne Less Severe

Anomaly.Non Adherence : Published Procedure

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Took Evasive Action

Resolatory Action.Controller : Issued New Clearance

Consequence.FAA : Reviewed Incident With Flight Crew

## Supplementary

Problem Areas : ATC Human Performance

Narrative :

WE WERE IN CRUISE FLT AT FL330 ON THE CYPRESS 3 ARR. AS WE (ACFT X) PROGRESSED ON THE STAR TO MIA, I MENTIONED TO THE CAPT THAT WE SEEMED A BIT HIGH TO MAKE OUR EXPECTED XING RESTR AT THE POINT ON THE STAR. I ASKED CTR FOR LOWER, AND DIDN'T HEAR A RESPONSE. I TRIED AGAIN, ONLY TO HEAR ANOTHER PLT RESPOND, 'BLOCKED.' I LISTENED FOR A FEW SECONDS AND REALIZED THAT WE COULD ONLY HEAR PLTS XMITTING, NOT THE CTLRS. I FIGURED THAT THE PREVIOUS SECTOR HAD FORGOTTEN TO HAND US OFF AND WE FLEW OUT OF THEIR RANGE, SO THE CAPT AND I BOTH LOOKED FOR A ZMA FREQ ON THE CHART. WE PICKED ONE AT RANDOM AND I MADE CONTACT. HE ASKED OUR POS. I REPLIED THAT WE WERE AT FL330 APCHING THE CYY VOR. HE TOLD US TO SWITCH TO ANOTHER FREQ. AS I CHKED IN, THE CTLR ASKED OUR POS. I TOLD HIM WE WERE TURNING OVER THE CYY VOR ON THE ARR AT FL330. ABOUT THAT TIME, THE TCASII ANNOUNCED 'TFC!' AND SHOWED A TARGET AT 12 O'CLOCK AND ABOUT 8 MI AT OUR ALT. THE CTLR AGAIN ASKED OUR POS AND I REPEATED MY PREVIOUS XMISSION. THE TCASII THEN GAVE US AN RA, COMMANDING US TO DSND. THE CAPT DISENGAGED THE AUTOPLT AND DSND'D ABOUT 700 FT, TO FL323. WE ALSO HAD VISUAL CONTACT WITH THE AIRPLANE (ACFT Y) TRAVELING IN THE OPPOSITE DIRECTION AT FL330. I ESTIMATE OUR HORIZ SEPARATION TO BE ABOUT 1 MI. ONCE THE TFC WAS PAST US, WE CLBED BACK TO FL330. I TOLD THE CTLR THAT WE HAD AN RA. THE CTLR DID NOT ACKNOWLEDGE THIS, BUT INSTEAD TOLD US TO EXPEDITE DOWN TO FL240. ON THE ARR, THE CTLR GAVE US A SERIES OF S-TURNS TO MAKE THE XING POINT. THE CTLR THEN TOLD US TO CALL THEM ONCE WE GOT ON THE GND. WE LANDED WITHOUT FURTHER INCIDENT. THE CAPT SPOKE TO A SUPVR ON THE PHONE. HIS MAIN CONCERN SEEMED TO BE WHY THE CTLR DIDN'T KEEP THE OTHER ACFT OUT OF OUR WAY, SINCE THEY WEREN'T TALKING TO US IN THE MOMENTS BEFORE THE TFC CONFLICT. WE TOLD HIM OUR SIDE OF THE STORY. HE THANKED US FOR THE INFO.

Synopsis :

MD82 INITIATES EVASIVE TCASII MANEUVER DUE TO OPPOSITE DIRECTION, SAME ALT TFC.

**Time**

Date : 199911

Day : Sun

Local Time Of Day : 1801 To 2400

**Place**

State Reference : MI

Altitude.MSL.Single Value : 33000

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.ARTCC : ZAU.ARTCC

Make Model : MD-80 Series (DC-9-80) Undifferentiated or Other Model

**Aircraft / 2**

Controlling Facilities.ARTCC : ZAU.ARTCC

Make Model : A320

**Person / 1**

Function.Controller : Radar

ASRS Report : 455394

**Person / 2**

Function.Controller : Handoff Position

Experience.Flight Time.Total : 250

Experience.Flight Time.Last 90 Days : 15

ASRS Report : 455393

**Person / 3**

Function.Controller : Radar

**Person / 4**

Function.Oversight : PIC

Function.Flight Crew : Captain

**Person / 6**

Function.Oversight : PIC

Function.Flight Crew : Captain

**Person / 5**

Function.Flight Crew : First Officer

**Events**

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Published Procedure

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 1

Independent Detector.Other.Flight CrewA : 4

Independent Detector.Other.Flight CrewB : 5

Resolutory Action.Flight Crew : Took Evasive Action

**Supplementary**

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Narrative :

I WAS WORKING THE RADAR POS ALONE, NOT VERY BUSY. ZOB CALLS ME AND TELLS ME THEY CAN'T TAKE ANY MORE EWR FLTS -- I'M IN THE HOLD. I HAD ACR X 10-15 MI FROM THE ZOB BOUNDARY. I ALSO HAD ANOTHER EWR FLT 25 MI IN TRAIL. I TURNED ACR X TO A 360 DEG HDG AND THEN ISSUED A PRESENT POS HOLD. I HAD TO GO BACK AND SHUT OFF THE OTHER DEPS BELOW HIM TO ENSURE SEPARATION. I THEN HAD TO VECTOR THE IN TRAIL EWR FLT DOWN TO THE S. IN THE MEANTIME, I HAD ACR Y FILED GIJ..KLANT GOING OVERSEAS. I PUT HIM ON A 350 DEG VECTOR TO GO AROUND THE HOLDING PATTERN AIRSPACE. SINCE ACR X WAS NOT EVEN IN MY AIRSPACE ANYMORE, I DIDN'T KNOW ABOUT THE OTHER SECTOR'S FL330 TFC. THERE WAS ALSO FL310 TFC, SO I COULDN'T DSND EITHER ACFT. WHEN THE 350 DEG HDG WASN'T WORKING, I ADJUSTED THE PLAN AND TURNED TO A 070 DEG HDG, DSND TO FL310, THE TURNED FURTHER R TO 090 DEGS. I TURNED ACR X FROM A 270 DEG HDG TO A 330 DEG HDG. THEY PASSED, ACCORDING TO THE NTAP, 4.6 MI AND 900 FT. THIS WAS THE THIRD TIME THAT NIGHT ZOB PLACED US IN NO NOTICE HOLDING FOR EWR. IT'S A VERY COMMON OCCURRENCE AND FORTUNATELY THERE'S NEVER BEEN AN ERROR BEFORE THIS ONE. HOWEVER, IT WAS ONLY A MATTER OF TIME. THIS SIT IS VERY DANGEROUS NO MATTER HOW MANY ACFT ARE ON THE FREQ. ACR X DID RESPOND TO A TCASII RA AND CLBED TO FL335. SUPPLEMENTAL INFO FROM ACN 455393: I WAS AT THE HDOF POS AT KEELER SECTOR. ZOB HAD JUST SLAMMED US IN THE HOLD. THE RADAR CTLR WAS VECTORING (OR HOLDING) ACR X WBOUND AT FL330. ACR Y WAS PUT ON A NBOUND VECTOR TO AVOID TFC. ACR X WAS IN EMPIRE SECTOR'S AIRSPACE, WHICH STARTS AT FL330 AND UP. BELOW IS PULLMAN SECTOR'S AIRSPACE. WHEN IT WAS CLR THAT ACR Y AND ACR X WOULD BE IN CONFLICT, I COORDINATED A DSCNT TO FL310 FOR ACR X. THE RADAR CTLR INSTEAD TURNED ACR Y E AND DSND TO FL310. SEPARATION WAS LOST, ALTHOUGH IT APPEARED THAT THE ACFT PASSED BY AT LEAST 5 MI.

Synopsis :

ZAU ARTCC CTLR VECTORING ACR TFC EBOUND IS TOLD BY ZOB ARTCC THEY WERE UNABLE TO ACCEPT ANY MORE ACFT TO EWR.

**Time**

Date : 199911  
Day : Tue  
Local Time Of Day : 0601 To 1200

**Place**

Locale Reference.Airport : BTV.Airport  
State Reference : VT  
Altitude.MSL.Bound Lower : 1800  
Altitude.MSL.Bound Upper : 3000

**Environment**

Flight Conditions : Marginal

**Aircraft / 1**

Controlling Facilities.Tower : BTV.Tower  
Make Model : Fighting Falcon F16

**Aircraft / 2**

Controlling Facilities.Tower : BTV.Tower  
Make Model : Beech 1900

**Person / 1**

Function.Controller : Local  
Experience.Flight Time.Total : 1200  
ASRS Report : 455418

**Person / 2**

Function.Flight Crew : Single Pilot

**Person / 3**

Function.Oversight : PIC  
Function.Flight Crew : Captain  
Experience.Flight Time.Total : 2100  
Experience.Flight Time.Last 90 Days : 30  
Experience.Flight Time.Type : 1900  
ASRS Report : 456021

**Events**

Anomaly.Other Spatial Deviation : Track Or Heading Deviation  
Anomaly.Conflict : Airborne Less Severe  
Anomaly.Inflight Encounter : Weather  
Anomaly.Non Adherence : Clearance  
Independent Detector.Aircraft Equipment : TCAS  
Independent Detector.Other.ControllerA : 1  
Resolatory Action.Flight Crew : Took Precautionary Avoidance Action  
Resolatory Action.Controller : Issued New Clearance  
Consequence.FAA : Reviewed Incident With Flight Crew

**Supplementary**

Problem Areas : ATC Human Performance  
Problem Areas : Flight Crew Human Performance  
Problem Areas : Weather

Narrative :

A FLT OF 3 F16'S (X) WERE PROCEEDING STRAIGHT IN TO RWY 15 FOR AN OVERHEAD APCH, L BREAK, 1800 FT BREAK ALT. THERE WAS A B1900 (Y) COMMUTER THAT DEPARTED RWY 19 ON RWY HDG. THIS ACFT WAS TURNED R HDG 320 DEGS AND LEVEL 2000 FT ABOUT 3 MI SW OF THE ARPT. THE F16'S DID NOT BREAK L BUT TURNED W. THEY WERE ABOUT 1 MI W OF THE FIELD WHEN THEY ADVISED THEY COULDN'T BREAK L BECAUSE OF A CLOUD. THEY WERE HEADED DIRECTLY AT THE B1900 AND I GAVE THEM AN IMMEDIATE TURN AND CLB TO GET AWAY FROM THE COMMUTER. WE SPOKE WITH THE F16 FLT LEADER LATER AND ADVISED HE CAN'T JUST BREAK OFF HIS APCH AND TURN ANY WAY HE WANTS WITHOUT TELLING US. AT 350 KTS, IF HE TURNS IN AN UNEXPECTED DIRECTION, IT MAY CAUSE CONFLICTS VERY QUICKLY. THE PLT SAYS THAT HE TURNED R OUT OF THE PATTERN BECAUSE HE THOUGHT IT WAS MORE IMPORTANT TO STAY CLR OF CLOUD. HE SAID THE WX WAS BETTER TO THE W. SUPPLEMENTAL INFO FROM ACN 456021: WX AT BTV RPTED AS 6000 FT BROKEN AND 6 MI VISIBILITY. CLRED FOR A VISUAL APCH TO RWY 15 AT BTV. SOMEWHERE BTWN 1-3 MI OFF OF THE APCH END AT 1800 FT MSL (GOING TO INITIAL) IT BECAME APPARENT THAT THE BREAK COULD NOT BE ACCOMPLISHED DUE TO A CLOUD DIRECTLY OVER THE FIELD AND E OF THE FIELD. WHILE DEVIATING TO THE W SLIGHTLY TO MAINTAIN CLR OF CLOUDS, A XMISSION TO TWR WAS MADE TO INFORM THAT THE OVERHEAD PATTERN COULD NOT BE ACCOMPLISHED, AND REQUESTED VECTORS BACK TO RADAR. TWR GAVE AN IMMEDIATE L TURN TO 360 DEGS AND CLB TO 3000 FT. A COMMUTER B1900 RPTEDLY HAD TO REACT TO TCASII ADVISORIES AS WE DEVIATED 1/2 MI W AROUND THE CLOUD. TWR RPTS ALSO THAT LEGAL SEPARATION WAS MAINTAINED AND NO VISUAL CONTACT WAS ESTABLISHED BTWN THE ACFT. MY COMMENTS: THE ATIS HAD NOT UPDATED PROPERLY. ACTUAL CONDITIONS OVERHEAD WERE ACTUALLY 2000 FT AND 3 MI. I WOULD NOT HAVE ATTEMPTED AN OVERHEAD IF ATIS WAS CLOSE TO ACTUAL CONDITIONS. I QUESTION TCASII PRECISION IN A MANEUVERING ENVIRONMENT. THE B1900 HAD JUST DEPARTED RWY 19 AND TURNED R TO 320 DEGS. I DON'T THINK WE WERE REALLY A CONFLICT.

Synopsis :

BTV CTLR RECOGNIZES THAT F16 FLT TURNS CONTRARY TO INSTRUCTIONS AND COMES INTO CONFLICT WITH B190 DEPARTING FROM ANOTHER RWY, ISSUING ALTERNATE CTL INSTRUCTIONS.



## Time

Date : 199911

Day : Sat

Local Time Of Day : 1801 To 2400

## Place

Locale Reference.Airport : ORD.Airport

State Reference : IL

Altitude.MSL.Single Value : 5000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.TRACON : C90.TRACON

Make Model : Large Transport, Low Wing, 2 Turbojet Eng

## Aircraft / 2

Controlling Facilities.TRACON : C90.TRACON

Make Model : Any Unknown or Unlisted Aircraft Manufacturer

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 10000

Experience.Flight Time.Last 90 Days : 150

ASRS Report : 455533

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Departure

## Events

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Took Evasive Action

Resolatory Action.Controller : Issued Alert

## Supplementary

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

I WAS FLYING ACFT ON DEP FROM ORD. WE WERE LEVEL AT 5000 FT ON HDG 090 DEGS. ATC ISSUED US A 360 DEG HDG WHICH WAS READ BACK WITH FLT NUMBER BY THE CAPT. THERE WAS NO QUESTION WITH EITHER OF US THAT IT WAS FOR US. A FEW MINS LATER WE WERE ISSUED AN IMMEDIATE TURN TO 120 DEGS AND TOLD OUR HDG WAS SUPPOSED TO BE 100 DEGS. WE SAW ANOTHER ACFT ON TCASII CLBING AND WAS ONLY 200 FT BELOW AND APPEARED TO BE WITHIN 1/2 MI AND CLOSING. I MADE AN IMMEDIATE HARD R TURN AND MISSED TFC. WE NEVER SAW THE ACFT VISUALLY AND ATC NEVER EXPLAINED WHAT WAS THE ORIGINAL MISTAKE OR WHO MADE THE ERROR. REGARDLESS OF WHO MADE THE ORIGINAL MISTAKE, QUICK ACTION BY ATC AND TCASII ENABLED US TO RECOGNIZE AND AVOID FURTHER CONFLICT.

Synopsis :

MLG ACR CREW HAD A TCASII RA IN ORD CLASS B AIRSPACE.

## Time

Date : 199911

Day : Sat

Local Time Of Day : 1201 To 1800

## Place

State Reference : TN

Altitude.MSL.Single Value : 29000

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.ARTCC : ZME.ARTCC

Make Model : MD-80 Series (DC-9-80) Undifferentiated or Other Model

## Aircraft / 2

Controlling Facilities.ARTCC : ZME.ARTCC

Make Model : Commercial Fixed Wing

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 11000

Experience.Flight Time.Last 90 Days : 280

Experience.Flight Time.Type : 1800

ASRS Report : 455765

## Person / 2

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 3800

Experience.Flight Time.Last 90 Days : 280

Experience.Flight Time.Type : 280

ASRS Report : 456875

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Radar

## Events

Anomaly.Conflict : Airborne Less Severe

Anomaly.Non Adherence : Published Procedure

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 4

Resolatory Action.Controller : Issued New Clearance

Resolatory Action.Controller : Separated Traffic

## Supplementary

Problem Areas : ATC Human Performance

Narrative :

HDG 145 DEGS ON RADAR VECTOR AT FL290 APPROX 55 NM SE OF BNA. CTR ISSUED CLRNC TO IMMEDIATELY DSND TO FL240 AND TURN L TO 090 DEG HDG. WE THEN GOT A TA WHICH SHOWED THE OTHER ACFT 2 NM AT OUR 4 O'CLOCK POS. LEVELED OUT AT FL260 AND WHEN CLR, WAS CLRED ON COURSE BACK UP TO FL330. SUPPLEMENTAL INFO FROM ACN 456875: WHILE AT FL290 50 NM SE OF BNA ON A HDG OF 145 DEGS ASSIGNED BY CTR, WE WERE TOLD TO DSND IMMEDIATELY TO FL240. WE GOT A TA ON THE TCASII SHOWING AN ACFT AT OUR 4 O'CLOCK POS AT OUR ALT AND 2 MI AWAY.

Synopsis :

AN MD80 CREW IS SUBJECTED TO A POTENTIAL CONFLICT WHEN THE ZME CTLR MISJUDGES TFC AT THEIR CO-ALT 50 MI SE OF BNA, TN.

**Time**

Date : 199911

Day : Tue

Local Time Of Day : 0601 To 1200

**Place**

State Reference : OH

Altitude.MSL.Bound Lower : 23000

Altitude.MSL.Bound Upper : 24000

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.ARTCC : ZID.ARTCC

**Aircraft / 2**

Controlling Facilities.ARTCC : ZID.ARTCC

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 12000

Experience.Flight Time.Last 90 Days : 110

Experience.Flight Time.Type : 800

ASRS Report : 455948

**Person / 2**

Function.Flight Crew : First Officer

Experience.Flight Time.Total : 2980

Experience.Flight Time.Last 90 Days : 240

Experience.Flight Time.Type : 800

ASRS Report : 455946

**Person / 3**

Function.Oversight : PIC

Function.Flight Crew : Captain

**Person / 4**

Function.Controller : Radar

**Events**

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Conflict : Airborne Less Severe

Anomaly.Non Adherence : Company Policies

Anomaly.Non Adherence : Published Procedure

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.ControllerA : 4

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Took Evasive Action

Resolatory Action.Flight Crew : Took Precautionary Avoidance Action

Resolatory Action.Controller : Issued New Clearance

**Supplementary**

Problem Areas : Flight Crew Human Performance

Narrative :

AT FL240, ZID ISSUED A DSCNT CLRNC. THINKING IT WAS OURS, MY FO READ IT BACK AND I STARTED THE DSCNT. SHORTLY THEREAFTER WE RECEIVED A TA THEN AN RA, WHEN ATC CLRED US BACK UP TO FL240. THE TFC WAS A DC8 CLBING. WE HAD THE TFC IN SIGHT WHEN WE RECEIVED THE TA AND COULD SEE THAT IT WOULD PASS SAFELY TO OUR L. THINKING CTRLR ERROR, WE THOUGHT NOTHING MORE OF IT UNTIL WE WERE PARKED AT THE GATE AND WERE GIVEN A PHONE NUMBER TO CALL. WE FOUND OUT LATER THAT WE HAD ANSWERED ANOTHER FLT'S DSCNT CLRNC.

Synopsis :

ACR TAKES ANOTHER ACFT'S CLRNC AND DSNDZ RESULTING IN A TCASII RA.

**Time**

Date : 199911

Day : Mon

Local Time Of Day : 1201 To 1800

**Place**

Locale Reference.Airport : LAS.Airport

State Reference : NV

Altitude.AGL.Single Value : 400

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.Tower : LAS.Tower

Make Model : MD-80 Super 80

**Aircraft / 2**

Controlling Facilities.Tower : LAS.Tower

Make Model : Cessna Single Piston Undifferentiated or Other Model

**Aircraft / 3**

Controlling Facilities.Tower : LAS.Tower

Make Model : B737 Undifferentiated or Other Model

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

ASRS Report : 456002

**Person / 2**

Function.Flight Crew : First Officer

ASRS Report : 456001

**Person / 3**

Function.Flight Crew : Single Pilot

**Person / 4**

Function.Oversight : PIC

Function.Flight Crew : Captain

**Person / 6**

Function.Controller : Departure

**Person / 5**

Function.Controller : Local

**Events**

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.None Taken : Insufficient Time

Consequence.FAA : Reviewed Incident With Flight Crew

**Supplementary**

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

FLT WAS CLRED INTO POS ON RWY 1R AND ADVISED TO BE READY. AS SOON AS THE FIRST HALF OF A B737 CLRED THE RWY, WE WERE CLRED FOR TKOF. I TURNED CTL OF THE ACFT OVER TO MY FO. THE TKOF PROCEEDED UNEVENTFULLY AND AT 400 FT AGL A L TURN WAS INITIATED IN ACCORDANCE WITH THE RED ROCK 2 SID. AS MY FO BEGAN THE TURN, I GLANCED TO THE L AND OBSERVED A SINGLE ENG CESSNA DIRECTLY TO OUR L ALSO STARTING A L TURN. SIMULTANEOUSLY A TCASII WARNING SOUNDED. MY ACFT WAS CLBING VERY RAPIDLY AND IN A FEW SECONDS WE PASSED ABOVE AND SLIGHTLY TO THE R OF THE CESSNA. EVERYTHING HAPPENED SO QUICKLY THAT NO EVASIVE ACTION WAS TAKEN TO AVOID THE ACFT. UPON CONTACTING LAS DEP CTL, WE WERE ADVISED OF THE CESSNA TFC. I WAS STARTLED AND STILL SOMEWHAT SHAKEN BY THE SUDDEN APPEARANCE OF THIS ACFT AND COMMUNICATED THIS TO DEP CTL WHEN TIME PERMITTED. I WAS GIVEN A TELEPHONE NUMBER AND ASKED IF I DESIRED AN FAA REPRESENTATIVE TO MEET ME IN SJC. I SAID THAT WOULD NOT BE NECESSARY. UPON ARR IN SJC I SPOKE WITH ATC MGR IN LAS. WE DISCUSSED WHAT HAD HAPPENED AND ATC MGR ADMITTED THE SIT COULD HAVE BEEN AVOIDED HAD THE TWR OPERATOR ADVISED US OF THE CESSNA TFC WHICH HAD DEPARTED JUST AHEAD FROM AN INTXN ON RWY 1L. HE ASSURED ME THAT THE INCIDENT WOULD BE DISCUSSED AT THE NEXT SAFETY MEETING.

Synopsis :

ACR HAS TFC CONFLICT WITH TFC FROM PARALLEL RWY DURING TKOF.



**Time**

Date : 199912

Day : Thu

Local Time Of Day : 1201 To 1800

**Place**

Locale Reference.Airport : GSP.Airport

State Reference : SC

Altitude.MSL.Bound Lower : 10000

Altitude.MSL.Bound Upper : 18000

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.ARTCC : ZTL.ARTCC

Controlling Facilities.TRACON : GSP.TRACON

Make Model : B737-800

**Component / 1**

Aircraft Component : Traffic Collision Avoidance System (TCAS)

Aircraft Reference : X

Problem : Malfunctioning

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 5000

Experience.Flight Time.Last 90 Days : 150

Experience.Flight Time.Type : 1000

ASRS Report : 456456

**Person / 2**

Function.Flight Crew : First Officer

**Person / 3**

Function.Controller : Departure

**Person / 4**

Function.Controller : Radar

**Events**

Anomaly.Aircraft Equipment Problem : Less Severe

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Returned To Assigned Altitude

Resolatory Action.Flight Crew : Took Precautionary Avoidance Action

Resolatory Action.Other : Turned Off TCAS 2

Consequence.Other : Maintenance Action

**Supplementary**

Problem Areas : Aircraft

Narrative :

WHILE ON CLB/DEP FROM GSP TO ATL ON ACR X, LEVEL AT 10000 FT MSL, TCASII GAVE AN RA AND SHOWED POP-UP TFC DEAD AHEAD. TCASII CALLED FOR A CLB. FO INITIATED A CLB OF 400-500 FT. NO ACFT SEEN AND ATC RPTED NO TFC. THEN WHILE CLBING THROUGH 13000 FT MSL, TCASII AGAIN GAVE AN RA OF 'MONITOR VERT SPD' AND SHOWED A NEED FOR DECREASING PITCH IN PFD. POP-UP TFC SHOWED ON NOSE AGAIN. WE LEVELED OFF AND TFC DISAPPEARED. ZTL RPTED NO TFC AND NONE OBSERVED. THEN CLBING THROUGH FL180, TCASII AGAIN GAVE AN RA FOR POP-UP TFC DEAD AHEAD. WE OBSERVED NO TFC AND TOOK NO ACTION. TURNED TCASII OFF FOR REMAINDER OF FLT AND ENTERED IN ACFT LOG AS TCASII MALFUNCTION. RPTED TO COMPANY BY CDR.

Synopsis :

FLC OF A B737-800 RESPONDED SEVERAL TIMES DURING DEP CLB TO A TCASII RA SHOWING APCHING TFC HEAD-ON. HOWEVER, NO TFC WAS OBSERVED OR INDICATED TO BE IN CONFLICT BY ATC, BOTH DEP AND CTR CTL.

**Time**

Date : 199912

Day : Thu

Local Time Of Day : 1201 To 1800

**Place**

Locale Reference.Airport : SGJ.Airport

State Reference : FL

Altitude.AGL.Single Value : 1500

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Make Model : Citation 10

**Aircraft / 2**

Make Model : Bonanza 33

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 11000

Experience.Flight Time.Last 90 Days : 100

Experience.Flight Time.Type : 200

ASRS Report : 457614

**Person / 2**

Function.Flight Crew : First Officer

**Person / 3**

Function.Flight Crew : Single Pilot

**Person / 4**

Function.Other Personnel : Unicom Operator

**Events**

Anomaly.Other Spatial Deviation : Uncontrolled Traffic Pattern Deviation

Anomaly.Conflict : NMAC

Anomaly.Non Adherence : FAR

Anomaly.Non Adherence : Published Procedure

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Took Evasive Action

**Supplementary**

Problem Areas : Airport

Problem Areas : FAA

Problem Areas : Flight Crew Human Performance

Narrative :

AS WE APCHED ST AUGUSTINE, WE CALLED UNICOM AND WERE ADVISED THEY WERE USING RWY 13. WE ENTERED AND CALLED L DOWNWIND. A BONANZA CALLED 5 MI N AND WAS ADVISED ALSO THAT THEY WERE USING RWY 13. HE CALLED ENTERING L DOWNWIND FOR RWY 6. WE TOLD HIM WE WERE ON DOWNWIND FOR RWY 13. THEN WE SAW HIM JUST AS TCASII TOLD US TO CLB. HE WAS AT 1400 FT. WE TALKED WITH THE FBO PERSON ON DUTY AND SHE STATED THAT THE 'LOCALS' NEVER PAID ATTN TO THEIR TA'S. USING RWY 6 AND RWY 13 AT THE SAME TIME IS A DANGEROUS PRACTICE. WHEN WE WERE READY FOR TKOF AT RWY 13, WE COULD NOT SEE THE TKOF AREA OF RWY 6. BUILDINGS BLOCK THE VIEW. THIS IS A TRAINING BASE WHICH CREATES A LOT OF TFC. RWY 6 IS TOO SHORT FOR JETS. THERE USED TO BE A CTL TWR THERE AND IT NEEDS TO BE RE-MANNED BEFORE THERE IS A COLLISION. THERE IS SERIOUS DANGER WHEN BOTH RWYS ARE BEING USED AND UNICOM DOES NOT HAVE ANY AUTH, NOR SHOULD IT HAVE.

Synopsis :

A CITATION 750 CAPT RPTED THAT ACFT AT SGJ DO NOT HEED THE INFO GIVEN THEM BY UNICOM. IN THIS CASE, HE WAS ON APCH FOR RWY 13 AND EXPERIENCED AN NMAC WITH AN ACFT PURPOSELY FLYING AN APCH TO RWY 6.

**Time**

Date : 200004

Day : Mon

Local Time Of Day : 1801 To 2400

**Place**

Locale Reference.Airport : SNA.Airport

State Reference : CA

Altitude.MSL.Bound Lower : 2100

Altitude.MSL.Bound Upper : 3000

**Environment**

Flight Conditions : VMC

**Aircraft / 1**

Controlling Facilities.Tower : SNA.Tower

Make Model : MD-90 Series (DC-9-90) Undifferentiated or Other Model

**Aircraft / 2**

Controlling Facilities.Tower : SNA.Tower

Make Model : Cessna Aircraft Undifferentiated or Other Model

**Aircraft / 3**

Controlling Facilities.Tower : SNA.Tower

Make Model : Cessna Aircraft Undifferentiated or Other Model

**Person / 1**

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 9000

Experience.Flight Time.Last 90 Days : 200

Experience.Flight Time.Type : 600

ASRS Report : 469173

**Person / 2**

Function.Flight Crew : First Officer

**Person / 3**

Function.Controller : Local

**Person / 4**

Function.Flight Crew : Single Pilot

**Person / 5**

Function.Flight Crew : Single Pilot

**Events**

Anomaly.Airspace Violation : Entry

Anomaly.Conflict : NMAC

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Resolatory Action.Flight Crew : Took Evasive Action

**Supplementary**

Problem Areas : Airspace Structure

Problem Areas : ATC Human Performance

Problem Areas : Flight Crew Human Performance

Narrative :

WITH FO AS PF FLYING THE MD90 NOISE ABATEMENT PROFILE AT SNA, AIRCRAFT AT STEEP DECK ANGLE (APPROX 15 DEGS), POWER CUT BACK TO 1.25 EPR, AIRSPEED AT  $V_2 + 10$  PER THE PROFILE. WHILE APPROX 4 ISNA DME CLIMBING THROUGH 2100 FT MSL OUTBOUND FOR 3000 FT MSL, TCAS RA ALERTED US TO POP-UP TRAFFIC AT CLOSE RANGE. AURAL ADVISORY 'TRAFFIC, TRAFFIC.' IMMEDIATELY WENT TO RESOLUTION ALERT, 'CLB, MONITOR VERT SPD, CLB.' VSI RA WAS COMMANDING A RATE OF 3300 FPM WITH OUR CURRENT CLB RATE AT 2200 FPM WITH POWER WAY BACK AT 1.25 EPR. CONFLICT RED BOX WAS SUPERIMPOSED UNDER OUR ACFT SYMBOL ON THE VSI DISPLAY. WE DISCONNECTED THE AUTO-THROTTLES IMMEDIATELY, ADVANCED POWER AND INCREASED OUR CLB RATE. HOWEVER, WITH THE POWER BACK SO FAR WE DID NOT REACH TARGET CLB RATE UNTIL WE WERE CLEAR OF CONFLICT. CREW NEVER DID SEE THE CONFLICT AIRCRAFT AND VSI DISPLAY INDICATED -02 WITH THE RIGHT WING OF OUR ACFT SYMBOL SUPERIMPOSED OVER THE RED BOX OF THE CONFLICT ACFT. WE NOTIFIED TOWER OF OUR RA RESPONSE AND WERE INFORMED THAT CONFLICT WAS PROBABLY A CESSNA. CONTROLLER SEEMED UNAWARE OF THE ACFT UNTIL WE ADVISED HIM. TWR HAD ADVISED US OF VFR TFC AT 3500 MSL DURING OUR TAKE-OFF CLRNC, SO WE WERE EFFECTIVELY SANDWICHED BETWEEN TWO VFR ACFT WHILE TRYING TO FLY THIS NOISE-ABATEMENT PROFILE. IN MY OPINION, THIS SNA NOISE ABATEMENT PROC IS HAZARDOUS. IT REQUIRES STEEP DECK ANGLES, OBSCURING VISUAL LOOKOUT. COMPLICATED PROCS REQUIRE AN ABNORMAL AMOUNT OF HEADS-DOWN COMPOSITE FLYING, DETRACTING FROM VISUAL LOOKOUT. ALSO WITH STEEP DECK ANGLE, ACFT IS AT  $V_2 + 10$  KNOTS WITHOUT MUCH ABILITY TO TRADE SOME AIRSPEED FOR ALT. ADDITIONALLY, THE REDUCED PWR SETTING SIGNIFICANTLY INCREASES THE SPOOL UP TIME, THEREBY LIMITING OUR MANEUVERING POTENTIAL FOR POP-UP RA'S SUCH AS THIS WHICH REQUIRE STEEP CLBS. I STRONGLY RECOMMEND THAT THIS SNA NOISE ABATEMENT PROC BE DRASTICALLY SIMPLIFIED OR ELIMINATED BEFORE WE DUMP AN ACFT ON TOP OF NEWPORT BEACH. THIS PROC IS DANGEROUS. CALLBACK CONVERSATION WITH RPTR REVEALED THE FOLLOWING: RPTR SAID THAT IT WAS A SUNDAY AND THE TRAFFIC BELOW THAT WAS UNREPORTED WAS IN THE CLASS C WITHOUT CONTACT WITH SNA TWR. THE TRAFFIC ABOVE WAS PREVIOUSLY REPORTED WITH THE TAKEOFF CLRNC AND A RESTRICTING ALT HAD BEEN ISSUED TO AVOID IT. THE RPTR SAID THAT THEY WERE NEVER ABLE TO RESTORE POWER IN TIME TO INCREASE TO THE CLIMB RATE COMMANDED BY TCAS. HE ATTRIBUTES THIS TO THE VERY CLOSE SPACING. HE REPEATED HIS CLAIM THAT SOMETHING MUST BE DONE TO CHANGE THE PROCS SO THAT THERE IS SOME MANEUVERING SPACE LEFT TO THE PILOT. HE ALSO SEES A HAZARD CREATED BY THE PROC IN THE EVENT OF AN ENGINE FAILURE DIRECTLY AFTER TAKEOFF.

Synopsis :

MD90 FLYING NOISE ABATEMENT PROFILE FROM SNA HAS TCAS RA DURING REDUCED PWR PORTION. PLT WAS UNABLE TO RESTORE PWR TO COMPLETE COMMANDED AVOIDANCE MANEUVER BEFORE PASSING TFC LESS THAN 200 FT BELOW.

## Time

Date : 200004

Day : Fri

Local Time Of Day : 1201 To 1800

## Place

Locale Reference.Airport : CMH.Airport

State Reference : OH

Altitude.MSL.Bound Lower : 27000

Altitude.MSL.Bound Upper : 27300

## Environment

Flight Conditions : VMC

## Aircraft / 1

Controlling Facilities.ARTCC : ZOB.ARTCC

Make Model : B737-200

## Aircraft / 2

Controlling Facilities.ARTCC : ZOB.ARTCC

Make Model : Commercial Fixed Wing

## Component / 1

Aircraft Component : Autopilot

Aircraft Reference : X

Problem : Malfunctioning

## Person / 1

Function.Oversight : PIC

Function.Flight Crew : Captain

Experience.Flight Time.Total : 19000

Experience.Flight Time.Last 90 Days : 120

Experience.Flight Time.Type : 4000

ASRS Report : 459690

## Person / 2

Function.Flight Crew : First Officer

## Person / 3

Function.Oversight : PIC

Function.Flight Crew : Captain

## Person / 4

Function.Controller : Radar

## Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Altitude Deviation : Excursion From Assigned Altitude

Anomaly.Conflict : Airborne Critical

Anomaly.Non Adherence : Clearance

Anomaly.Non Adherence : Required Legal Separation

Independent Detector.Aircraft Equipment : TCAS

Independent Detector.Other.Flight CrewA : 1

Independent Detector.Other.Flight CrewB : 2

Resolatory Action.Flight Crew : Returned To Assigned Altitude

Resolatory Action.None Taken : Detected After The Fact

Consequence.Other : Maintenance Action

## Supplementary

Problem Areas : Aircraft

Narrative :

CRUISING FL270, 5P177 AUTOPLT ON 'B' CHANNEL IN ALT HOLD MODE. ACFT SUDDENLY PITCHED UP 5 DEGS TO 8 DEGS. AUTOPLT REMAINED ENGAGED. BOTH PLTS PUSHED OVER ON CTL WHEEL. ALT GAIN WAS 300 FT. TCAS COMMANDED DSCNT WHICH WE COMPLIED WITH. LEVELED OFF AGAIN AT FL270. THIS PROB OF RARE AUTOPLT RAPID DEVIATIONS HIGHLIGHTS THE NEED TO REMAIN FOCUSED, ATTENTIVE AND NEAR IF NOT PHYSICALLY ON THE FLT CTLS. WE REACTED WITHIN 2-3 SECONDS.

Synopsis :

B737 CREW HAD AN ALT EXCURSION.